

# **Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project**

## ***Setting and Land Use History***

The projects involve redevelopment of existing medical facilities structures and sites on the Stanford campus in the City of Palo Alto. The projects lie on relatively level land along Quarry Road, Welch Road and Campus Drive West. The existing setting is mixed in building density and landscape character, reflecting its conversion from agricultural uses to medical facilities beginning in the 1930s.

The medical center lies in a plain that was once oak woodland and grassland, located in the narrow flat lands between the marshes of the San Francisco Bay (to the north) and the rising foothills of the coastal range to the south. San Francisquito Creek lies ¼ mile to the west. At some time in the distant past (more than 10,000 years ago), there was a creek channel to the east of the current location of San Francisquito Creek within the boundaries of the proposed project; the gravel and sand of this ancient creek bed have been observed in deep excavations in the Medical Center and Shopping Center area. The meadows along San Francisquito Creek, to the northwest of the project area hosted a series of Native American settlements, beginning more than 5000 years ago. Beginning in the 1830s, Mexican ranchers settled nearby and the vicinity was used for grazing cattle, horses and sheep. In the early American period, the project area was owned by George and Elizabeth Gordon. Their home, Mayfield Grange, was located along San Francisquito Creek (about ¼ mile to the northwest of the project boundary). Elizabeth Gordon and her son-in-law planted a vineyard in 1875 in the general area of the Stanford Shopping Center from vine stock imported from France.

Leland and Jane Stanford purchased the former Gordon estate in 1876 and added its lands to the Palo Alto Stock Farm. They expanded the vineyard and constructed a winery in about 1880. The winery structures have been preserved and converted to commercial use, in the adjacent Stanford Shopping Center area. The area to the south of the winery was planted in orchards, as well as carrots, alfalfa, beets and corn to feed the hundreds of horses stabled at the Palo Alto Stock Farm. The Stanfords planned to build a new home and elaborate gardens to the east of the winery and had in fact begun laying out roads and gardens in 1883 in the present site of the Stanford Arboretum. After the death of their only child, Leland Stanford, Junior in 1884 they abandoned their plan to construct a new home and instead launched their efforts to construct a university in his memory on the Palo Alto Stock Farm.

Lying between the arboretum and the Stanford home and gardens, the project area was on the edge of the campus as planned by the Stanfords working with Fredrick Law Olmsted. It remained in agricultural use during the first quarter century of the university's history and few if any structures, other than irrigation ditches and farm roads, were constructed within the boundaries of the proposed project. The only feature of this early period that remains in the project area is Governor's Avenue: a road lined on both

sides by eucalyptus trees that led from the Stanford's carriage house along San Francisquito Creek to Lagunita and the Stock Farm stables to the south (Figure 10-1). Portions of the Governor's Avenue have been maintained to the south of Pasteur Drive; north of Pasteur in the project area there are a handful of individual trees but the alignment is absent.

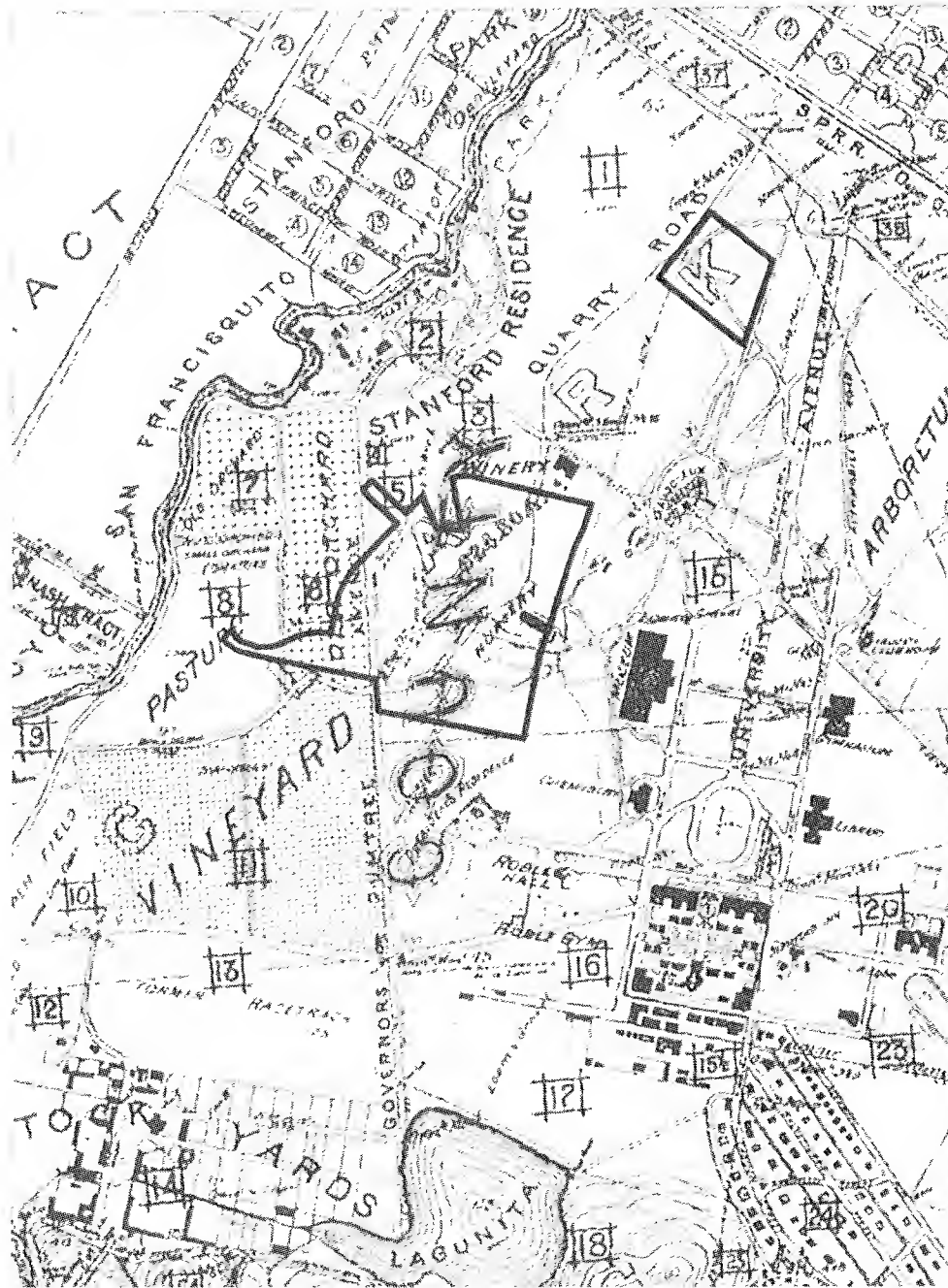
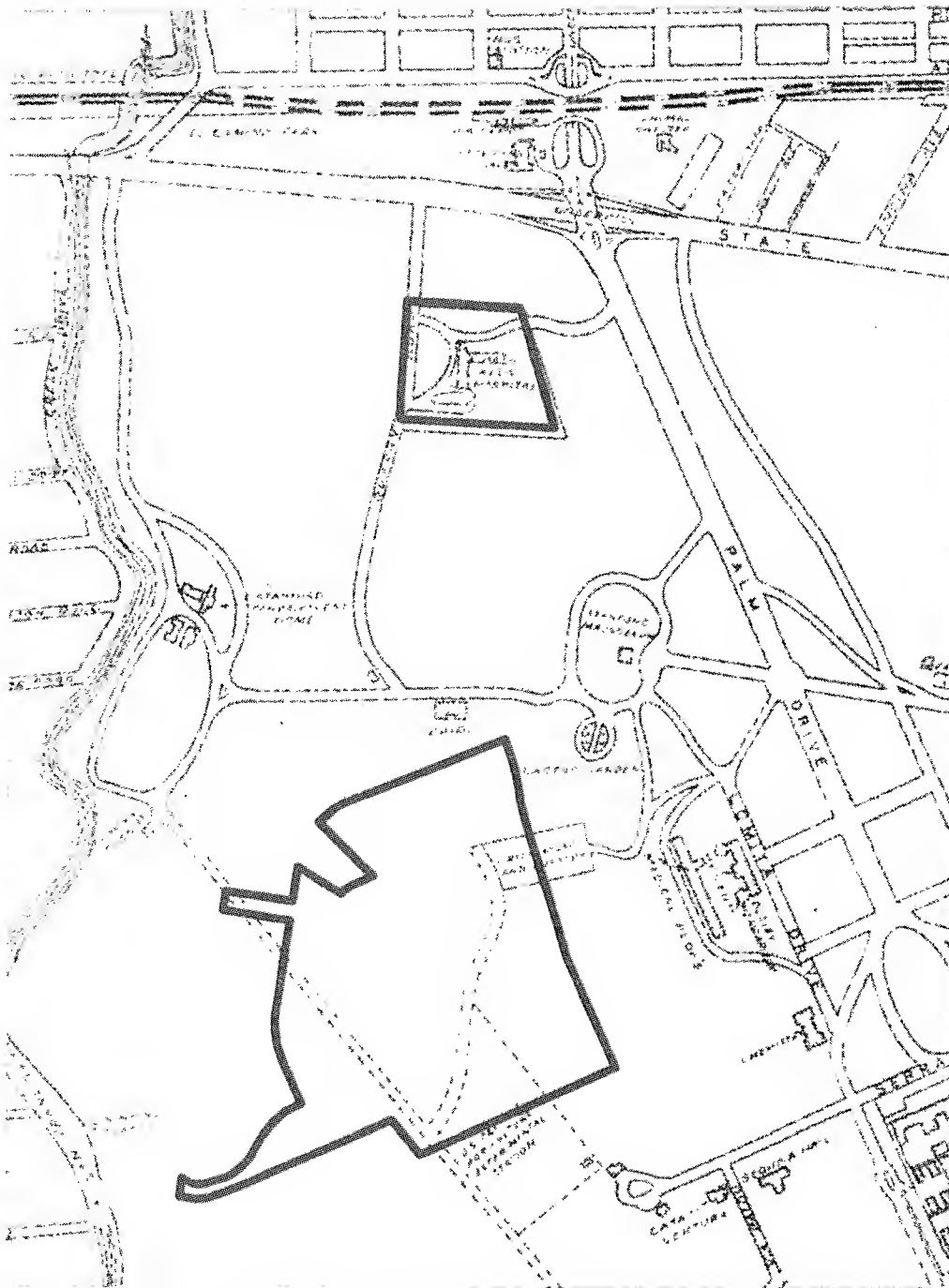


Figure 10-1: Detail from Survey of Stanford Lands, 1908,  
(Approximate project area boundary overlaid in red)

The university continued to use the project area for agricultural uses after the death of Mrs. Stanford in 1905. The Stanford home was badly damaged in the 1906 earthquake; one surviving section was renovated to house the Convalescent Home for Children in 1920. The Grounds Department established its nursery in the area and the winery was converted to a dairy in 1916. The university leased ten acres at the corner of Quarry Road and El Camino Real to the City of Palo Alto in 1929; the Palo Alto Hospital opened on the site in 1930. For a quarter of a century from 1930 to 1955 the land use pattern in the area remained stable: the Children's Convalescent Home operated on San Francisquito Creek, the Palo Alto Hospital functioned across Quarry Road, with the dairy and nursery to the south (*Figure 10-2*).



*Figure 10-2: Detail from Map of Stanford and Vicinity, 1941  
(Approximate project boundary overlaid in red)*

More intensive development of the area began in the mid 1950s, with the construction of the Stanford Shopping Center (1956) between Quarry and Sand Hill Roads along El Camino Real. Stanford University decided to move its medical school



from San Francisco to the campus, and planning for a new joint City of Palo Alto – Stanford University hospital began as well. When the new complex opened in 1959, it was surrounded by wheat fields and the trees from the old plant nursery site (*Figure 10-3*). Since 1960, the remaining agricultural lands to the west of the Arboretum have been developed as the Shopping Center expanded and housing was added along Sand Hill Road. Today the landscape setting shows few remnants of its agricultural past (*Figure 10-4*).



*Figure 10-3: Aerial photo looking towards El Camino Real and showing the new hospital and shopping center, 1959*



*Figure 10-4: Aerial photograph, 2005*

### ***Archaeological Resources in the Project Area***

Stanford University conducted an intensive archaeological survey of its lands in San Mateo and Santa Clara County in 1986-87; more than 60 prehistoric archaeological sites were recorded as a result of the survey. The Sand Hill Road Corridor Projects immediately to the north and west involved more than 20 years of archaeological testing and environmental review.<sup>1</sup> The area is well-studied. The results of the prior studies show that the prehistoric ancestors of the Ohlone Indians lived along San Francisquito Creek for more than 5000 years. Their village sites are located to the west of Sand Hill

Road, well outside of the project boundaries. There is little likelihood of prehistoric cultural deposits in the project area.

The agricultural uses of the late 19<sup>th</sup> and early 20<sup>th</sup> century largely have been erased by subsequent development at the medical center and shopping center area. The only structures in the project area from this period were those associated with the plant nursery. The site of the plant nursery is under a parking lot along Campus Drive West. It is unlikely that significant archaeological deposits from this historic period have survived in the project area.

The ancient creek bed gravels that underlie the medical center and shopping center have yielded fossils of extinct animals, including the upper limb of a giant bison recovered from the construction site for the Lucas Building in 1988. No intact fossil remains have been reported, only individual skeletal elements lodged in the gravels of the stream bed. The ancient stream bed has been seen in at least three locations: the Lucas Center, the Neiman Marcus store, and the storm drain along Quarry Road near El Camino. The proposed projects are sited in previously developed areas, however, given the depth of the ancient stream channel (more than 15 feet below current ground level); there is the possibility of additional fossil finds during project construction. There are no feasible techniques for investigating this stream channel prior to construction as it is deeply buried under roads and buildings; a qualified archaeologist or paleontologist should record and recover fossils from the site during construction, should the stream bed (whose precise location is unknown) be encountered.

### ***Potential Historic Resources within the Project Boundary***

The project retains the oldest building in the area, the Hoover Pavilion, while replacing secondary structures on its site. The proposed project involves demolition of a number of other buildings, most of which are less than 50 years old but some of which will reach that threshold during the lifetime of the project (*Figure 10-5*). The features that may be affected by the project are (in chronological order):

1. Governor's Avenue	1876-1878
2. Hoover Pavilion	1931, 1939
3. Nurses' Cottage	1941, 1948
4. 701 Welch Road	1957, 1961, 1998
5. 703 Welch Road	1958, 1963
6. 1101 Welch Road	1958
7. Main Medical Center Complex	1959, 1963

None of these features or properties is listed on a local, state or national inventory of historical resources, determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources, or included in a

historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code. Therefore these buildings and properties are not presumed to be historically or culturally significant under CEQA Guidelines 15064.5(a)(1) and (a)(2).

Under CEQA Guideline section 15064.5(a)(3), the lead agency may determine a building or property to be historically significant, provided its determination is supported by substantial evidence in light of the whole record. Generally, for properties that have not been listed or determined to be eligible for listing, the CEQA review process requires review against the California Register criteria.<sup>2</sup> The criteria are:

1. *Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*
2. *Associated with the lives of persons important to local, California or national history.*
3. *Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.*
4. *Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.*<sup>3</sup>

In order to be considered eligible for listing on the California Register, the property must meet at least one of the four criteria and display sufficient integrity to convey the reasons for its significance. In addition, for resources that have achieved significance within the past 50 years, “sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource”.<sup>4</sup> The majority of the standing structures in the project area are medical facilities or support medical uses. A historical context for the development of medical facilities in the 20th century forms the basis of the evaluations of significance of the structures that follows. First, however, the single surviving historic landscape feature from the 19<sup>th</sup> century agricultural period – Governor’s Avenue – is evaluated separately.

## **Governor’s Avenue**

Governor’s Avenue was planted by Governor Leland Stanford, Sr. between 1876 and 1878 as a tree-lined drive from the carriage house at his home along San Francisquito Creek to the reservoir at Lagunita (skirting the edge of his race track) and thence turning sharply to lead to the Palo Alto Stock Farm barns where he stabled and trained his trotting horses.

A road or avenue such as Governor’s Avenue can be a type of historic designed landscape if it meets the criteria for listing in the California Register. The City of Palo Alto treated the Governor’s Avenue as a potential historical resource in the Sand Hill Road Projects EIR<sup>5</sup>, however, the avenue does not appear on the Palo Alto Historical Inventory, the California Register of Historic Places or the National Register of Historic Places and no evaluation of its significance was provided by the Sand Hill Road EIR. To be treated as a significant historical resource, the avenue would need to meet one of the four criteria for listing, and retain sufficient integrity to be recognizable as historic. The National Register of Historic Places also offers more detailed guidance on historic

landscapes in its bulletin *How to Evaluate and Nominate Historic Designed Landscapes*<sup>6</sup>. Where the state instructions are lacking in detail, National Register publications provide additional guidance commonly used to clarify the more general instructions given by the state. The state criteria, however, guide the evaluation.

To be eligible for listing as a significant historic resource under criteria 1 (events) or 2 (persons), the avenue would need to be strongly associated with an important event (or pattern of events) in local, state or national history or with a person of historical importance. Here the Governor's Avenue is associated with Leland Stanford, Sr. and the horse breeding and training activities of the Palo Alto Stock Farm. However, to be listed for association the property should clearly represent the historical events or the specific achievements for which a person is recognized. Further, comparison with other properties associated with these events and persons should be conducted to identify whether the Governor's Avenue is strongly associated with significant events at the Palo Alto Stock Farm or in the life of Leland Stanford, Sr.<sup>7</sup>

The Palo Alto Stock Farm was composed of two breeding and training centers: the Trotting Farm on the western side of the Stanford property (near San Francisquito Creek and the current location of the Red Barn and Stanford Golf Course) and the Running Farm at the former Peter Coutts farm site to the east (the present location of Escondido Village, Rains Housing and the Escondido Elementary School). Each operation had its own stables, paddocks, race track and support facilities. The Palo Alto Stock Farm also included extensive agricultural areas: orchards, row crops, and a vineyard. The Palo Alto Stock Farm operated as a major horse breeding and training center – for trotters and thoroughbred race horses, from circa 1880 (the farms were purchased by Stanford piecemeal between 1876 and 1882) to 1903.<sup>8</sup> The farm was once recognized as “the greatest nursery for trotters in the world”.<sup>9</sup>

The Red Barn at the Trotting Farm is listed on the National Register of Historic Places (as the Palo Alto Stock Farm Barn) both for its architecture and association with events during the last quarter of the 19<sup>th</sup> century. The neighboring Brick Stable has been determined to be eligible for listing on the California Register by the County of Santa Clara. Along Campus Drive West there is also a California Historical Landmark marker for the early development of motion picture technology to mark the site of the famous series of Eadweard Muybridge photographs of a trotting horse taken at the track of the Trotting Farm in 1878. During the period of significance of the Palo Alto Stock Farm (1875-1900), Governor's Avenue was one of a number of farm roads that crossed the more than 6000-acre farm, many of which were planted as avenues. No specific event is recorded for the avenue: the horses were trained and raced on the race track, not the avenue. There are several listed properties with closer association to the Stock Farm's operations still standing. Governor's Avenue does not appear eligible for listing under criterion 1 for association with events at the Palo Alto Stock Farm.

Similarly, Leland Stanford, Sr. is an important person in American history. Stanford was Governor of California during the Civil War (1862-63), U.S. Senator (1885-1893); co-founder of the Central Pacific and Southern Pacific Railroads, the Occidental and Oriental Steamship Company and of Leland Stanford Junior University, as well as owner of a number of large properties across the U.S.<sup>10</sup> To be eligible for listing under criterion 2 for association with Leland Stanford, the avenue must be strongly linked to the activities for which Stanford is remembered and should be compared to

other properties related to Stanford's life and career.<sup>11</sup> As noted above, Stanford's achievements in horse breeding and racing are more closely associated with the surviving barns at the Palo Alto Stock Farm. His achievements as Governor of California are associated with the Governor's Mansion (Stanford-Lathrop House) in Sacramento. There are many railroad properties preserved throughout the west and in particular the Governor Stanford steam engine at the State Railway Museum in Sacramento symbolizes this element of his career for many thousands of visitors each year. Stanford University stands as a monument to his educational philanthropy. The Governor's Avenue is a minor feature compared to these landmark properties. It does not appear that Governor's Avenue meets the test of eligibility under criteria 2 for association with Leland Stanford, Sr.

A tree-lined avenue can also be important under criterion 3 as a fine example of a type of designed landscape, if it exhibits the characteristic features of the type. The characteristic features of a 19<sup>th</sup> century avenue are: regular spacing of a single or at most two species of trees, trees of the same size (often exotic species), roadway (intended to be traveled by carriage or on horseback) of a consistent width (often but not always a straight road), and in the case of estate avenues the destinations are often on axis and thus "framed" by the avenue. The practice of shading a drive with lines of trees, regularly spaced and of a single species, dates to the 17<sup>th</sup> century in Europe, is widespread in the United States by the second half of the 19<sup>th</sup> century, and became ubiquitous in the 20th century as the practice of planting city streets with trees became common<sup>12</sup>.

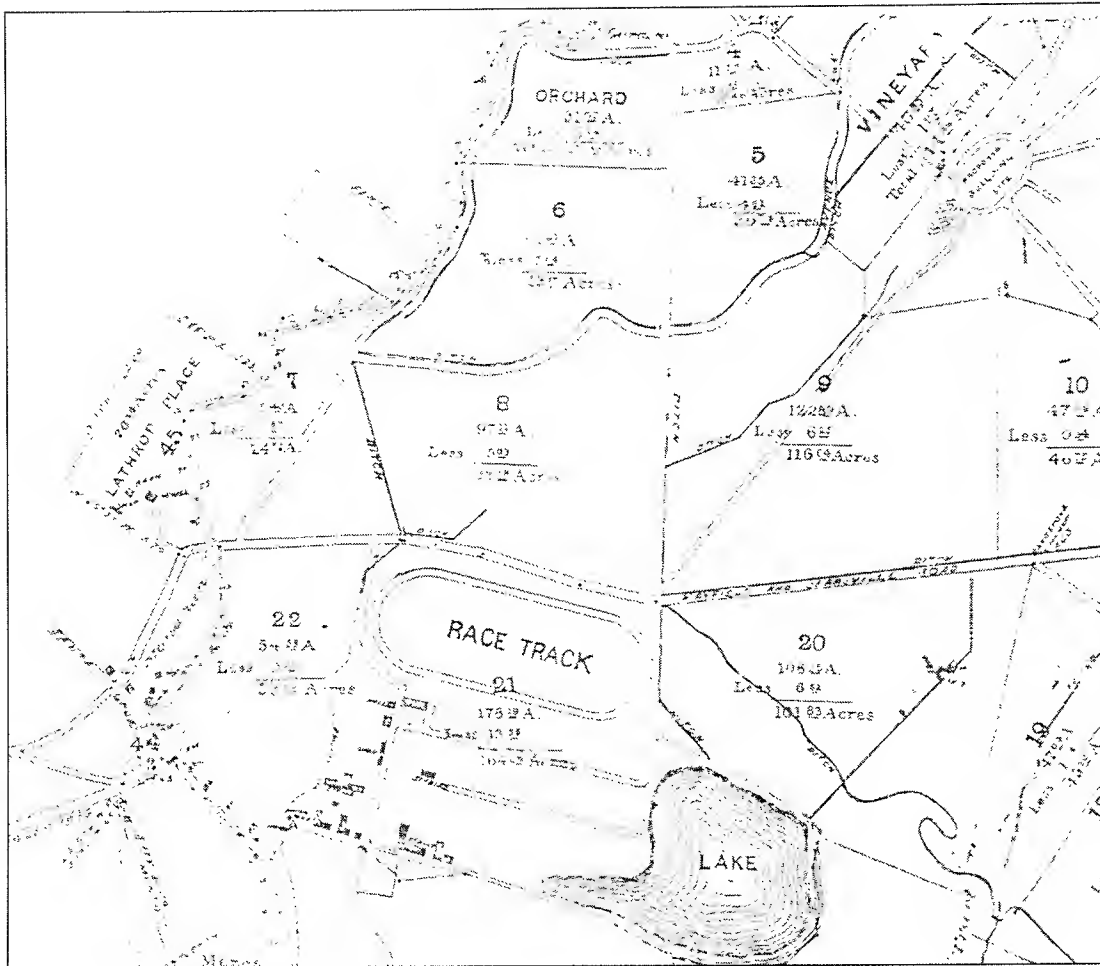
In its original configuration, Governor's Avenue was a good example of the type, displaying many of the characteristic features of a late 19<sup>th</sup> century avenue. The avenue was planted with more than 700 Tasmanian blue gum eucalyptus (*Eucalyptus globulus*) trees, originally planted twenty feet apart on both sides of the roadway (*Figure 10-6*). Early maps also show pines mixed with the eucalyptus. The two "arms" of the road were perfectly straight and consistent in width along the length (the long arm was more than a mile long).





*Figure 10-6: Governor's Avenue near the Trotting Farm, circa 1890*

The destinations, however, were not framed by the avenue: the Governor's Avenue terminus at the Stanford's home site was the yard of the stables and carriage houses (none of which was on axis with the avenue), similarly the avenue did not offer a view of the reservoir or an axial view of any of the large barns of the trotting farm complex (the avenue ended at a small shed). It appears to simply be the shortest route from the Stanford's house stable to the Trotting Farm, with the angled corner designed to avoid the race track (*Figure 10-7*). The more formal campus avenues, however, were clearly intended to frame major buildings: Palm Drive ends at the center of the Main Quad (before 1906 it ended at the massive Memorial Arch), and Pine Avenue neatly framed the Stanford family mausoleum. (Pine Avenue was planted after the Stanfords acquired the Coutts farm in 1882 and was a straight line between the proposed site for their new home and the Running Farm. The proposed home site was changed to the mausoleum site as plans for the university developed in the late 1880s.)



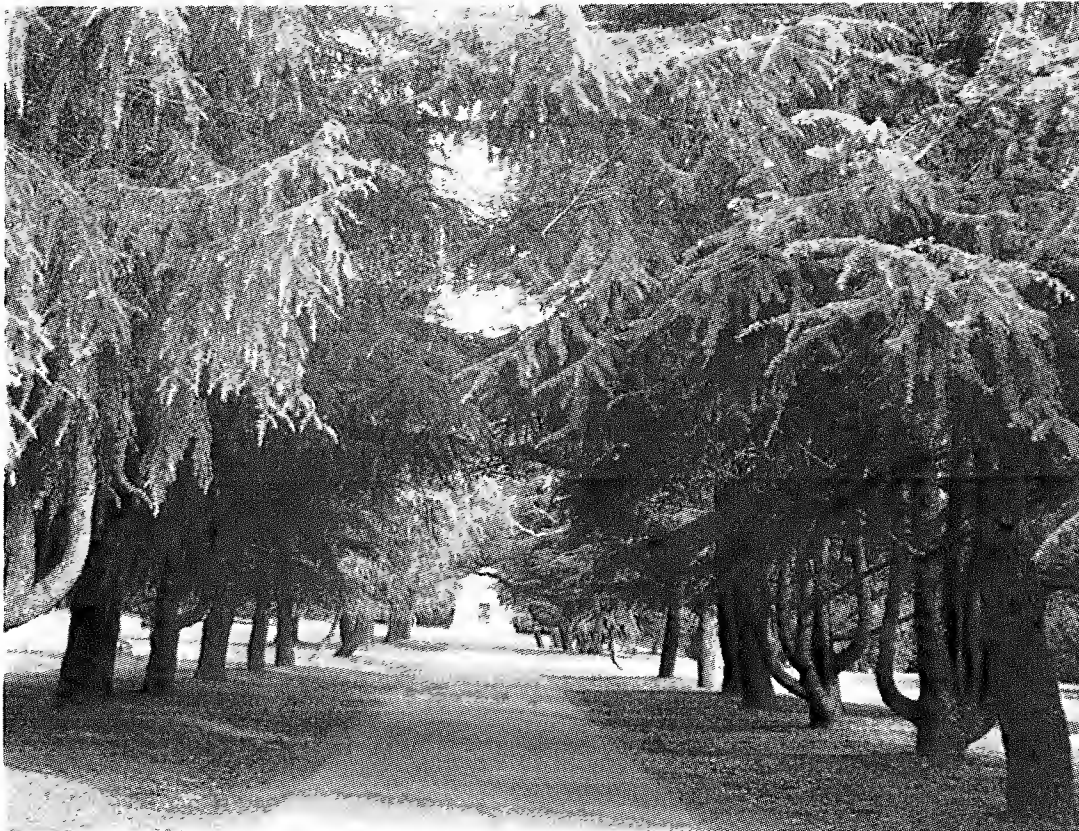
*Figure 10-7: 1883 Survey Map, Governor's Avenue Highlighted in Red*

As with the early avenues of the great European estates these early Stanford avenues “could be seen as a symbol of control over the landscape and its inhabitants; an expression of ownership and power”.<sup>13</sup> The Palm Drive and Pine Avenues are stronger formally, as they frame monumental architecture (*Figures 10-8, 10-9*). However, the Governor's Avenue exhibits most of the characteristic features of 19<sup>th</sup> century avenues: evenly spaced trees of matched size and type and a consistent roadway width. It is also remarkable for its strong straight lines. The avenue dominated the farm landscape of the vicinity for nearly a century and was certainly a powerful expression of Stanford's ownership and power. Governor's Avenue appears to be eligible for listing on the California Register under criterion 3 as embodying the distinctive characteristics of a 19<sup>th</sup> century tree-lined avenue. To be eligible for listing, the avenue must also continue to display its characteristic features, described by the California Register as the seven aspects of integrity: location, design, workmanship, materials, setting, feeling and association.





*Figure 10 -8: Palm Drive*



*Figure 10- 9: Pine Avenue (Stanford Family Mausoleum at terminus)*

Integrity of location for an avenue or other linear feature calls for its continued visible presence along a substantial amount of its historic route.<sup>14</sup> The Governor's Avenue has not functioned as a road for nearly a half century: it was interrupted by construction of the Stanford Golf Course in 1930, the medical center in the 1950s, and Governor's Corner (named for the turning in the avenue) student housing complex in the mid 1980s. Some segments continue to function as true roads: a segment known as Governor's Avenue running between Santa Teresa and Panama Streets, then through the Governor's Corner housing complex and around the corner to Campus Drive West. Three segments exist as bicycle/pedestrian paths: at the Stanford West Village Green west of Sand Hill Road, in the Stanford Medical Center between Pasteur Drive and Campus Drive West, and alongside Panama Street. The alignment is absent in two sections: within the project area boundary from Sand Hill Road across Welch Road to Pasteur Drive through the medical center and at the Stanford Golf Course the alignment has been erased by construction of the golf course, buildings and parking lots (*Figure 10-5*). The missing segments represent approximately 1/3 of the original length of the avenue (approximately 2500 feet of a 7500 foot original length).

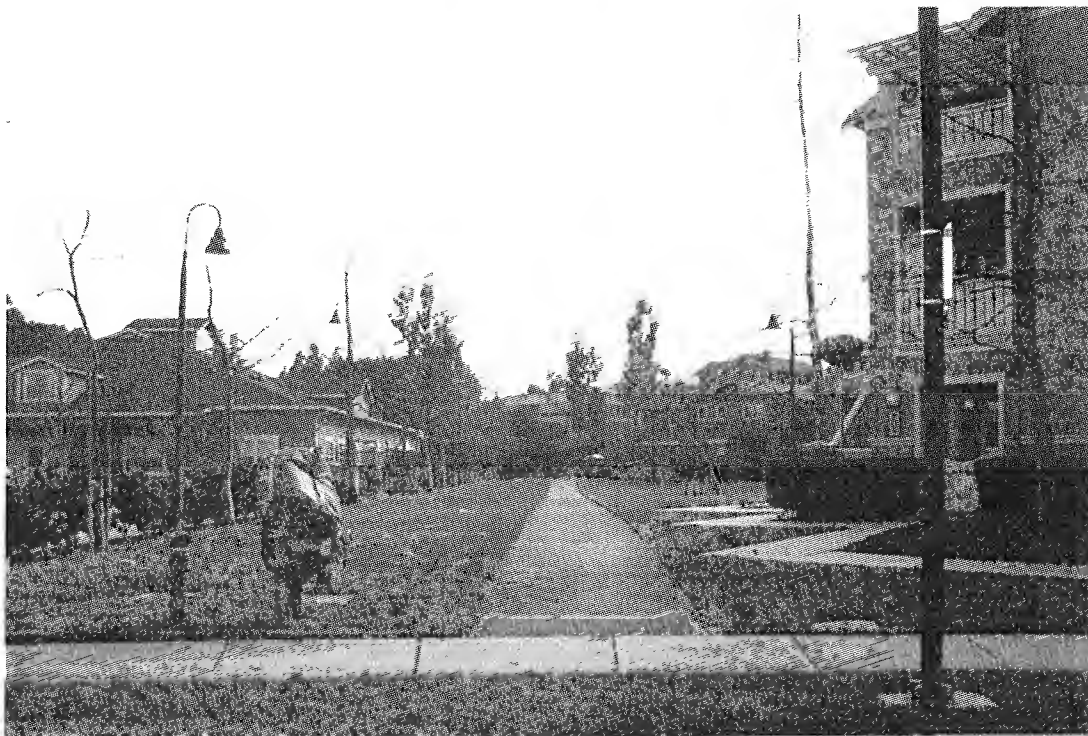
The integrity of the avenue's design, workmanship and materials depends in large part upon the trees with which it is planted. Their size, species and spacing are important characteristics. The avenue was planted with more than 700 Tasmanian blue gum eucalyptus (*Eucalyptus globulus*) trees, and an unknown number of pines, originally planted twenty feet apart on both sides of the roadway. In 1972, more than 600 of these trees were still standing (Bracewell 2005:121) but drought, frost and pests weakened the large trees (some had reached more than 100 feet in height and nearly 8 feet in diameter) and only 58 of the original trees have survived. Advice from the National Register of Historic Places on evaluating landscapes includes the following observation regarding original plant materials:

*A designed historic landscape need not exist today exactly as it was originally designed or first executed if integrity of location and visual effect have been preserved. Originality of plant materials can increase integrity but absence of original materials does not automatically disqualify a designed landscape. The absence of original vegetation may not diminish integrity, for example, if the same or similar species of appropriate size have been replanted to replace dead, diseased, or mature specimens. A boulevard that has lost its original trees but where appropriate new street trees have been planted may retain integrity<sup>15</sup>.*

Governor's Avenue has been replanted along parts of its route with consistently sized and spaced trees. As the original eucalyptus become diseased or die they are replaced with the California Sycamore, a tree of similar shape and growth habits. (London plane trees were mistakenly used on one segment and oaks on another.) Unfortunately, this treatment is not entirely consistent along the replanted segments. However, the look and feel of the avenue, and the characteristic features of tree spacing and linearity are present within each of the intact segments and along the majority of its length (*Figures 10-10, 10-11, 10-12, 10-13, 10-14*).



*Figure 10-10: Governor's Avenue south of Pasteur Drive (2007)*



*Figure 10-11: Governor's Avenue north of Sand Hill Road (2007)*



*Figure 10-12: Governor's Avenue south of Campus Drive West (along Panama Street)*





*Figure 10-13: Governor's Avenue south of Santa Teresa Street*



*Figure 10-14: Governor's Avenue from Corner towards Campus Drive West*

The intact portions of Governor's Avenue are a significant historic resource, potentially eligible for listing for its importance to the local community as an early example of a tree-lined avenue in Palo Alto. Within the project boundary, however, most of the alignment is absent. A very short fragment remains between the sidewalk and a parking lot at the rear of the 900 Blake Wilbur Drive, and another fragment has been retained across the Pasteur Drive median, ending in a parking lot on Campus Drive West (Figure 10-5).

### ***Historical Context for Medical Building Evaluation: The Evolution of Modern Medical Facility Design in the Twentieth Century***

Following the instructions for evaluating historic resources, these properties should be placed in a larger social context.<sup>16</sup> The six properties under study are all related to developments in medical care in the 20<sup>th</sup> century, and the expression of these developments in the San Francisco Bay region. The historical context that follows briefly describes major trends in medical treatment facilities during three periods of the 20<sup>th</sup> century: Pre-World War II (1900-1940), World War II (1941-1945), and Post-World War II (1946-1999). The subsequent section presents evaluations of the six properties in the project area using these larger themes to assist in determining historical significance.

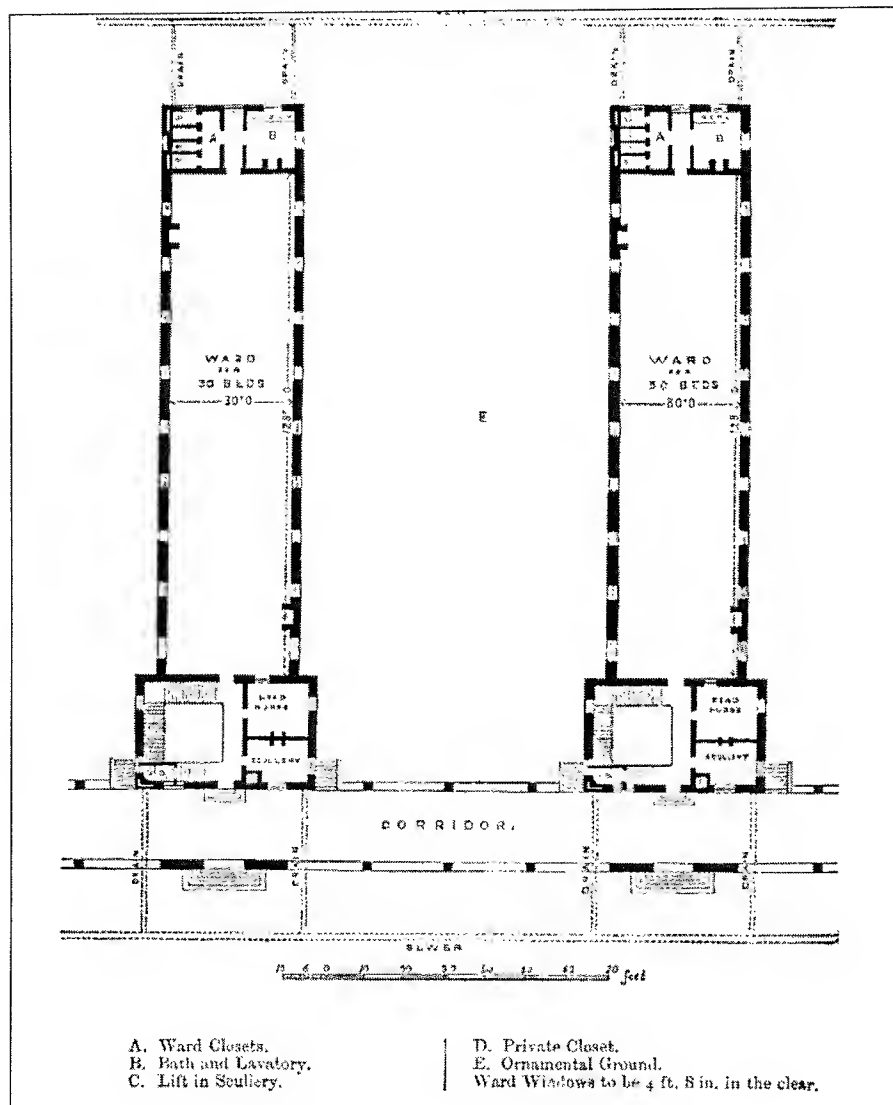
Specialized facilities for the treatment of the sick have been documented since the development of urbanism in the early empires of the Mediterranean (including Egypt, Greece, Mesopotamia, and Rome). The first hospital structures emerged associated with Catholic convents and monasteries in the early middle ages. Developments in the science and technology of medicine, and a new scale of suffering brought about by modern techniques of warfare, transformed the structure of hospital facilities in the second half of the 19<sup>th</sup> century. The emergence of new theories of disease, medical specializations, and rising use of technological equipment created an almost constant demand for renovation and replacement of health facilities in the 20<sup>th</sup> century. Surprisingly, some features have survived from the classical and medieval periods: for example, the therapeutic value of gardens, landscapes and tranquil settings continues to be recognized while the underlying theory of disease has been transformed.

The properties under study in the Stanford University Medical Center include several property types in the area of medical facilities: two hospitals, a medical school, medical research laboratories, and freestanding outpatient clinic buildings. These properties represent two periods of construction: the Palo Alto Hospital/Hoover Pavilion complex dates to the pre-World War II period, the Stanford Hospital, Medical School and Welch Road clinics and laboratories are post-World War II. These buildings will be evaluated in the context of medical facilities design in the 20<sup>th</sup> century. The properties will be evaluated to determine the extent to which they reflected innovations in design or medical treatment philosophies compared to similar facilities constructed in their respective periods.

## Pre-World War II Medical Facilities

### *Pavilion Hospitals*

Epidemics were a major impetus to hospital development at the turn of the century in growing population areas.<sup>17</sup> Fear of infection and contagious disease determined their design. The use of pavilion ward plans was widespread, developed first for use in military hospitals and popularized by Florence Nightingale in her influential publications *Notes on Hospitals* (1858) and *Notes on Nursing* (1859).<sup>18</sup> Pavilion wards were designed to break up large hospitals into smaller, standard-sized (20-30 bed) wards.<sup>19</sup> Each ward was designed as an independent “pavilion” with support facilities located at the ends of the building (to minimize traffic flow – and potential sources of contagion -- through the wards) (*Figure 10-15*). Elaborate ventilation systems, and careful placement of each bed next to an operable window, were required to insure that stale air left the building and fresh air entered it – reflecting a widespread belief that disease was transmitted through bad air.<sup>20</sup> These pavilions were one or two-story buildings spread out across the site, separated by courtyards or gardens to insure adequate natural light and air for each building. (Sunlight was believed to have a beneficial effect as well as fresh air.) The principles were reflected in huge Civil War hospitals with dozens of tent or barracks-style wards and the success of the model in limiting the spread of infection led to its widespread adoption in large U.S. hospitals, including one of the largest American hospitals, Johns Hopkins (designed 1876, completed 1885) (*Figure 10-16*).



*Figure 10-15: Typical pavilion ward layout.*



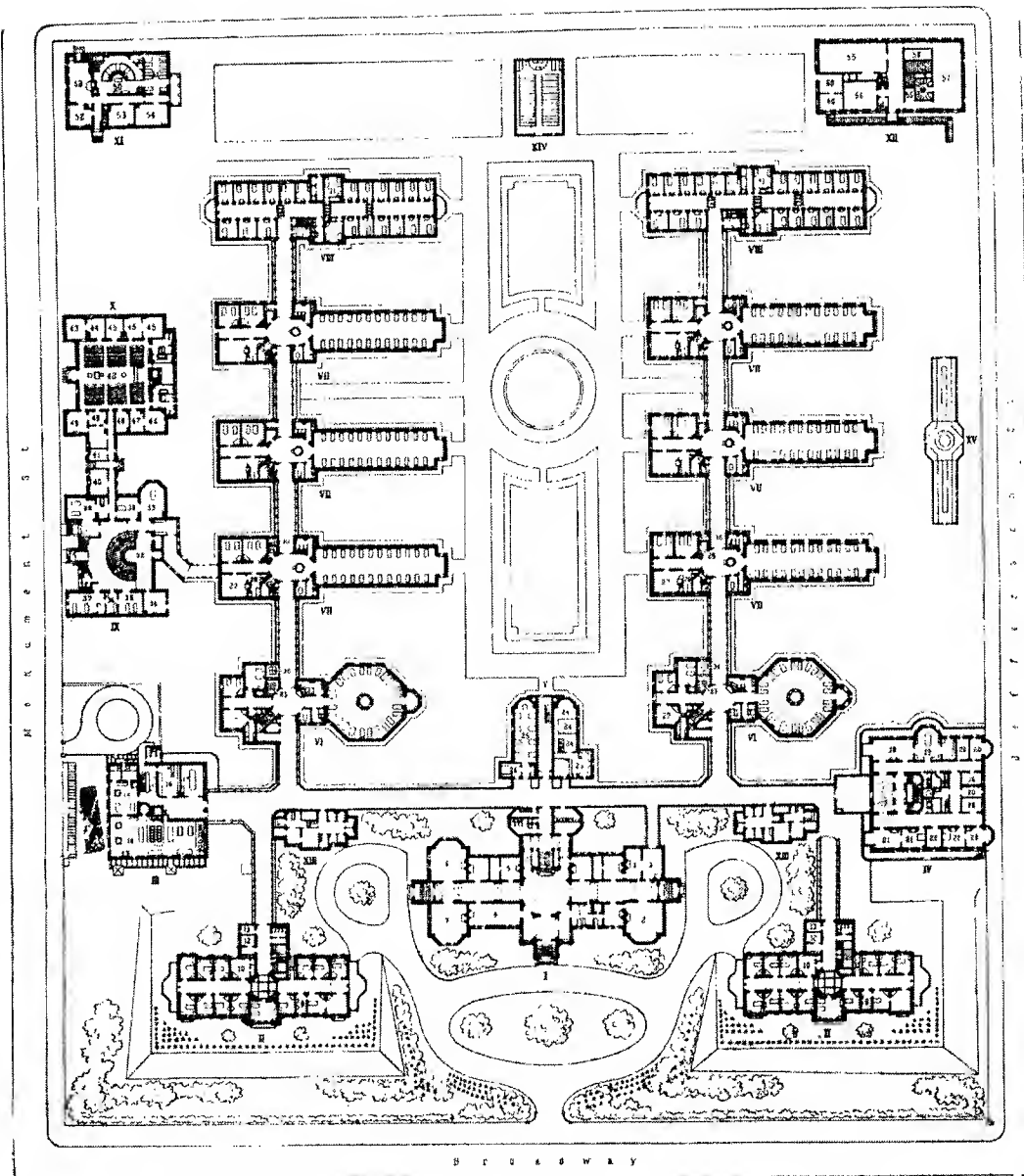


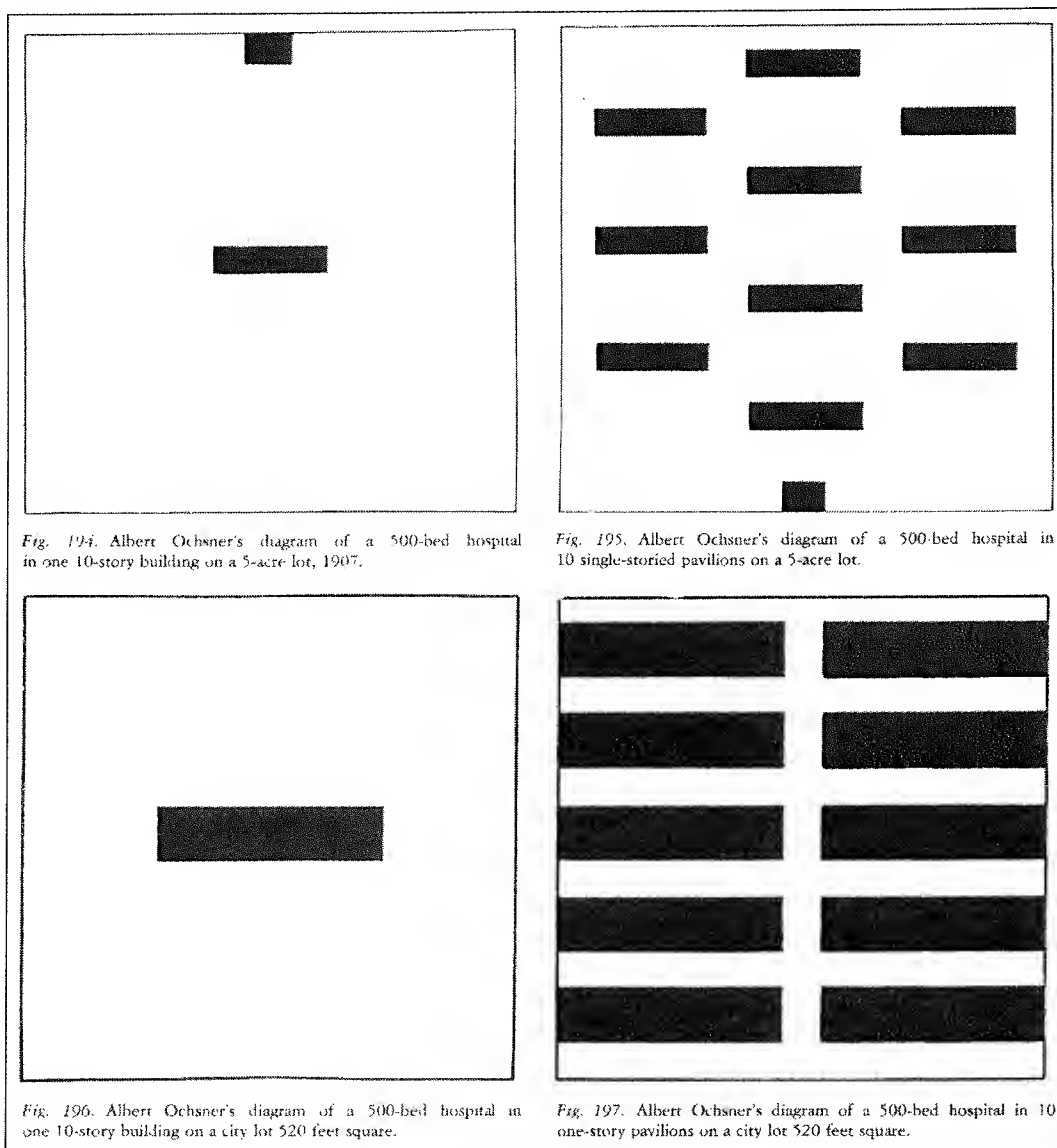
Fig. 183. Final plan for Johns Hopkins Hospital (John S. Billings's second plan) 1876.

*Figure 10-16: Pavilion plan at Johns Hopkins.*

Medical advances in the 19th century included the development of anesthesia (morphine and ether) and methods of sterilization (carbolic acid and steam), and the development a new theory of infectious disease: germ theory, with the isolation of specific causative agents for a long list of diseases during the 1880s and 1890s (anthrax, rabies, tuberculosis, diphtheria, tetanus, pneumonia, and many more). Cleanliness and the isolation of infectious patients continued to be critical in the hospital setting but it was no longer necessary to isolate non-infectious patients and the medical necessity of fresh

air and sunshine came into question. Laboratories began to appear in hospitals as a result of these discoveries as well<sup>21</sup>.

Classic pavilion hospitals were inefficient in land use, energy and building materials, and took more staff to supervise, clean and care for patients. Developments in construction technology in the 19th century – elevators, electricity, efficient water pumps, use of steel-reinforced concrete in construction – made multi-story buildings safer and less expensive to build, leading to the emergence of high-rise buildings in land-scarce urban areas by the turn of the century. By 1905, hospital administrators were studying the efficiency of multi-story designs to maximize land efficiency. Studies developed by Chicago surgeon Dr. Albert Ochsner were particularly influential in the shift from single story pavilions to high rise hospitals (*Figure 10-17*).



*Figure 10-17: Ochsner's diagrams.*

### *High-rise hospitals*

After the turn of the century, architects began to experiment with new vertical forms for hospitals: essentially stacking pavilion-style wards on top of service floors. Fresh air, sunshine and garden settings continued to be popular features and new architectural forms emerged to maximize land use efficiency without sacrificing these features: circular wards and diagonal cross-plan blocks for example.<sup>22</sup> The efficiency of vertically integrated plumbing systems allowed architects to move sinks and toilets into patient rooms rather than at the ends of the wards. The new high-rise hospitals emerged as symbols of civic pride and economic vitality and in the U.S. began to resemble hotels – competing for patients by offering a range of room types (and costs), high staffing ratios, and furnishings that were more homelike in character.<sup>23</sup> Qualified nurses to provide this level of care were scarce, particularly during World War I, and many hospitals added housing for nurses and nursing schools – to recruit and train nurses -- to their facilities as well.<sup>24</sup>

While economy and efficiency drove the move towards taller structures, civic pride and competition led to highly ornamental architectural treatments (particularly on the exterior): beaux arts in the pre-World War I era, art deco emerging with great popularity worldwide in hospitals of the 1920s and 30s. Some design features carried forward through centuries of hospital design into the modern era: the notion of the hospital as a self-contained institution providing for itself the services of cooking, laundry and staff housing which emerged in monastery and convent hospitals of the medieval period; landscaped courtyards and grand entry plazas popular from the Renaissance “palace” style hospitals; verandas, sunrooms and solariums from Victorian period pavilion designs. These features were medically obsolete by the early 20<sup>th</sup> century but persisted as they met other human and institutional needs.

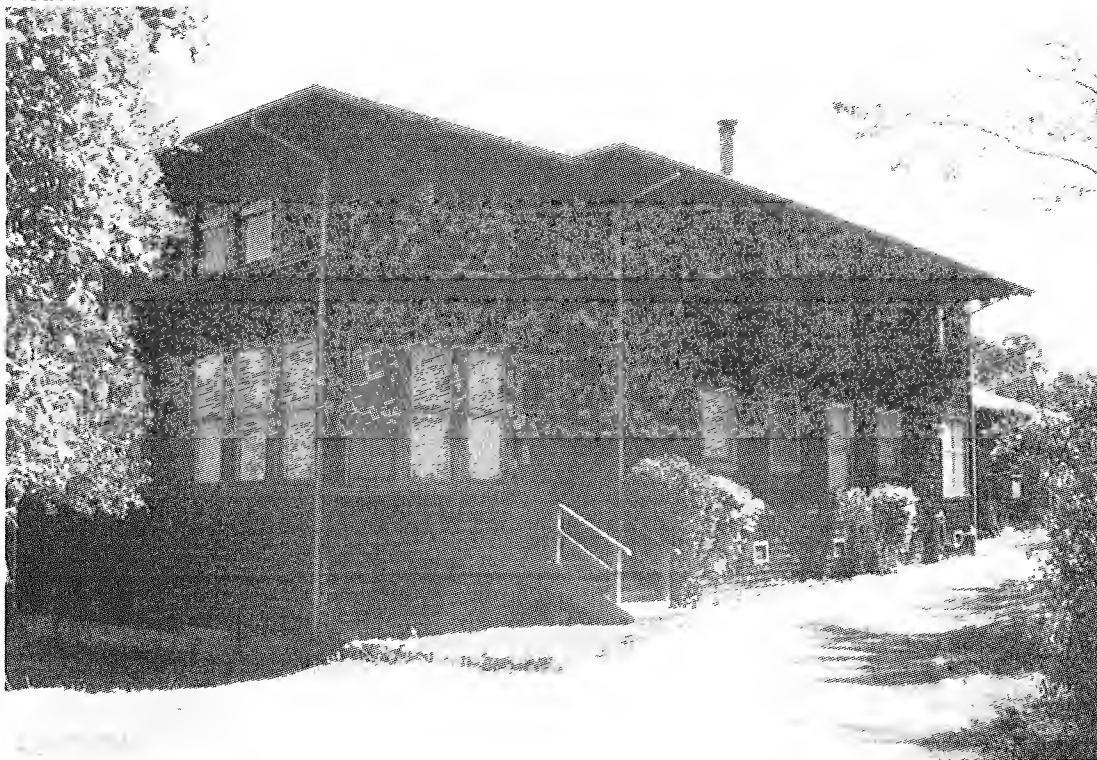
### *Pre-War Medical Facility Properties in the Palo Alto Area*

The trend in emergence of public hospitals in U.S. cities is closely followed by developments in Palo Alto and its vicinity. In 1900, Palo Alto had no public medical facilities. There were a handful of private physicians in town, operating out of their homes.<sup>25</sup> Following an outbreak of typhoid fever in 1903 that claimed twelve lives (including eight Stanford students) a small hospital was established by the Students’ Guild to serve the health needs of Stanford students and local residents (it had 20 beds). By 1910, a second private hospital containing about 40 beds was completed: the Peninsula Hospital, on the corner of Embarcadero Road and Cowper Street (*Figure 10-18*). The City of Palo Alto purchased the building in 1921 and entered into an agreement with Stanford to manage the hospital, which was renamed Palo Alto Hospital. The Palo Alto Hospital was expanded to 48 beds but by 1927 a committee had formed to investigate building a new, larger hospital building.<sup>26</sup>



*Figure 10-18: Peninsula Hospital (demolished)*

Medical facilities to serve army personnel based at Camp Fremont during the First World War were located in Menlo Park, at the site of the current Veteran's Administration facility on Willow Road.<sup>27</sup> Camp Fremont was quarantined during the 1918 Spanish influenza epidemic (there were 30 flu deaths at the camp hospital in Menlo Park). The Stanford Students' Guild operated its own isolation hospital on Alpine Road in 1915 (who by law could not be transported across the town boundary to the Peninsula Hospital) (*Figure 10-19*). In fact, the Stanford isolations hospital (and a separate ward for women on the main campus) treated more influenza patients (145) than the Peninsula Hospital (93) during the 1918 epidemic. Six students died in the epidemic.<sup>28</sup> The Students' Guild facilities were sold in 1921 when Stanford and Palo Alto agreed to jointly operate the Palo Alto Hospital at the Peninsula Hospital building on Embarcadero Road.



*Figure 10-19: Student's Guild Isolation Hospital (currently a private residence)*

In 1919 the Stanford Convalescent Home for Children was founded at the site of the Stanford family home on San Francisquito Creek. During the 1920s the "Con Home" built a series of one story pavilion wards in a simple Spanish Revival style alongside the Italianate Stanford house. Each ward had a sun porch alongside and the young patients were moved outside on sunny days to enjoy the fresh air and sunshine (*Figure 10-20*).<sup>29</sup>



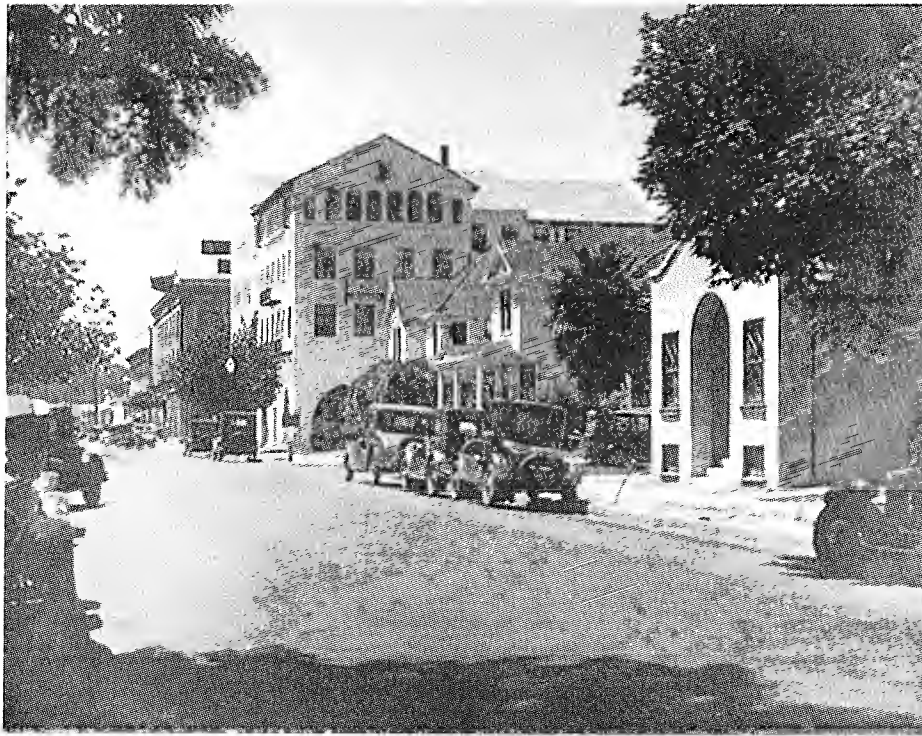
*Figure 10-20: Con Home (McLaughlin Unit) sun porch circa 1927(demolished)*

Also during the 1920s, a group of local physicians formed the Palo Alto Medical Clinic working out of offices at Hamilton and Bryant Streets in downtown Palo Alto. In 1931, the partners moved into a new building designed by Palo Alto architect Birge Clark – the Roth Building -- on the corner of Homer Avenue and Bryant Street (*Figure 10-21*). The Roth Building is a two-story Spanish Revival building with a well-known series of murals by muralist Victor Arnautoff showing medical scenes.<sup>30</sup> A number of other doctors and dentists established offices in Palo Alto during the 1920s, including a group at the Medico-Dental Building, also designed by Birge Clark, at 267 Hamilton Street (which currently houses University Art on its ground floor) (*Figure 10-22*).





*Figure 10-21: Roth Building (future home of the Palo Alto History Museum)*



*Figure 10-22: Hamilton Avenue with Medico-Dental Building in the center*

By the end of the 1920s, the need for a new hospital had become clear. The City of Palo Alto leased a ten-acre site on El Camino Real from Stanford University (Stanford would operate the hospital under an agreement with the City). The site was chosen because of its proximity to downtown Palo Alto and the Stanford Convalescent Home for Children.<sup>31</sup> The City of Palo Alto selected an Oakland architecture firm, Reed and Corlett, to design the hospital and raised \$480,000 for its construction from a combination of gifts and municipal bonds. Reed and Corlett had recently completed another high-rise hospital: the Peralta Hospital in Oakland in 1928, and were chosen for their experience with medical architecture.<sup>32</sup> The new 80 bed Palo Alto Hospital opened in May, 1931 (*Figure 10-23*).

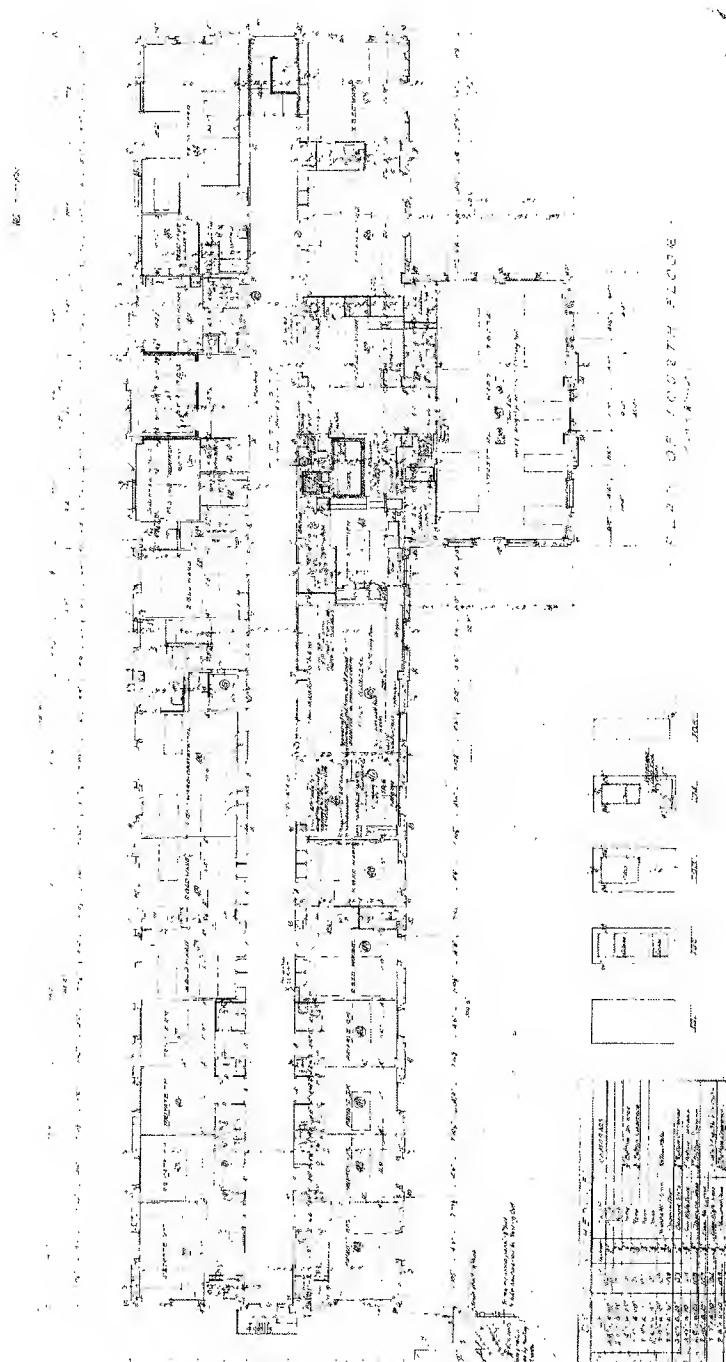


*Figure 10-23: Palo Alto Hospital circa 1931*

The Palo Alto Hospital had a standard floor plan for hospitals of the period: service functions (laundry, commissary, kitchen, staff rooms) on the ground floor, offices and lobby on the second floor, patient wards on floors three and four and operating rooms on the fifth floor. The floor plans were traditional pavilion style: services clustered near the entry (elevator and stairway) and patient beds arranged along the exterior walls (*Figure 10-24*). Unlike the classic open Nightingale wards, there was a mix of room types: one bed, two beds, four beds and an eight bed “industrial” ward – designed to



provide a range of room types depending on the patient's condition and ability to pay.<sup>33</sup> A wing was added to the hospital in 1939, doubling the number of patient beds (160).



*Figure 10-24: Palo Alto Hospital floor plan showing patient rooms with 1, 2, 4 or 9 beds*

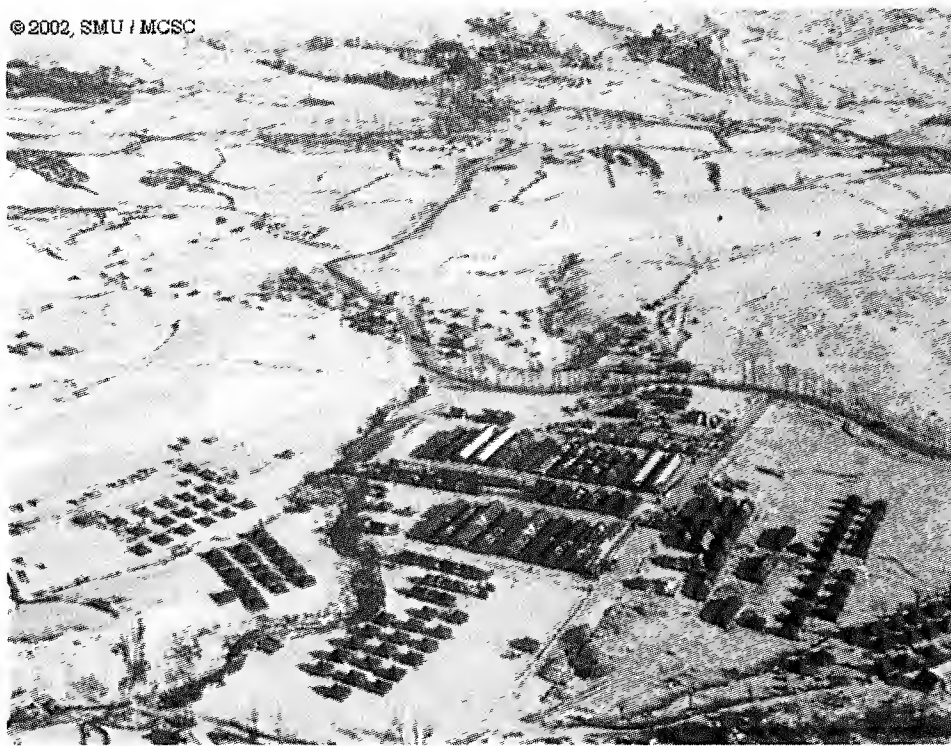
Architect Will Corlett highlighted the improved fire and earthquake safety features of the new building's steel-reinforced concrete construction, modern equipment, and homelike accommodations. He notes that "the serious work of the hospital is masked as much as possible. Bodies, soiled linen, rubbish, etc. are not transported through the departmental corridors." As in earlier pavilion hospitals, natural light and fresh air were provided: "the building is oriented so that a line due south bisects the angle between the two main wings which permits the sun's rays to reach all walls and the adjacent ground at some time every day."<sup>34</sup> Corlett was concerned to emphasize the "dignified and simple," "conservative and modernistic" design: "Adornment of the exterior...was not considered as justified." The tension between "unnecessary" ornament and suitably attractive civic architecture was a common theme in hospital design.<sup>35</sup> Nonetheless, Reed and Corlett's art deco design for the Palo Alto Hospital has many ornamental flourishes: a stepped "ziggurat" roof profile, terracotta friezes, and ornamental metalwork at the entry and roof cupola. A complete evaluation of the property is provided below. The art deco, high-rise exterior and basic interior floor plans are good examples of pre-World War II hospital design.

The Palo Alto Hospital in its 1931 and 1939 plans incorporated service functions inside the building, including the laundry and a few small rooms on the second floor to provide sleeping accommodations to nurses (5 beds) and interns (2 beds). The national trend was towards providing separate residential accommodations for staff – to recruit, train and retain nursing staff was a priority and accommodations within the high-rise hospital were not popular among the staff. In 1940, the Palo Alto Hospital constructed a small cottage to the rear of the hospital for nurses, which was expanded in 1949. Other support functions were also gradually moved out of the main buildings, creating a cluster of small utilitarian structures on the southeast corner of the site. The Nurses' Cottage is also evaluated below. Generally, the outbuildings on the Palo Alto Hospital site are vernacular in style, and plain in finishes and construction in comparison to the main hospital building.

## **World War II Era Medical Facilities**

Beginning with the U.S. entry into the war in 1941, the nation's labor and building material resources were focused on supporting the war effort: military installations and industrial facilities producing military equipment and support products. This included construction of a number of hospitals for treatment of war casualties, in Europe and the Pacific and at bases in the United States. Many of these sites were constructed in the same basic styles as field hospitals of the Civil War and World War I: a series of small open ward structures (tents or barrack-style buildings) organized along the lines of Nightingale wards of the last half of the 19<sup>th</sup> century (*Figure 10-25*).<sup>36</sup> Makeshift hospitals were also created in converted barracks, schools and factories. The system of field hospitals in Europe and the Pacific was supported by hospital ships and evacuation aircraft to transport the wounded back to the U.S. base hospitals for additional treatment and rehabilitation.

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*Figure 10-25: US Army 8<sup>th</sup> Evacuation Hospital, Pietra, Italy (Winter 1944-45)*

Major military installations were constructed or expanded in the San Francisco Bay Area and Monterey. The Letterman General Hospital at the Presidio in San Francisco was expanded during the war and at its peak treated more than 70,000 wounded in a single year (1945).<sup>37</sup> Medical facilities to serve workers in the war industries were also important. The Kaiser Richmond Field Hospital – ancestor of the Kaiser Permanente HMO – was founded in Richmond in 1942 to provide care to workers at the Richmond Shipyards (*Figure 10-26*).<sup>38</sup>



Photo Courtesy of the Richmond Museum of History

*Figure 10-26: Kaiser Richmond Field Hospital*

### *World War II Medical Properties in the Palo Alto Area*

The only major medical facilities constructed locally during the Second World War were those at Dibble Army Base in Menlo Park, which had a hospital and nurses' quarters. The Dibble General Hospital treated soldiers injured in the Pacific, specializing in plastic surgery and eye surgery, and at its peak contained 2400 beds (*Figure 10-27*). Nisei veterans wounded in Europe were transferred to Dibble General Hospital where they participated in publicity efforts to smooth resettlement of Japanese-Americans in Santa Clara and San Mateo counties after the end of the war (*Figure 10-28*). The base was decommissioned after the war and the land area redeveloped (to house the Stanford Research Institute in 1947, Menlo Park Civic Center and United State Geological Survey Western Region Headquarters in 1954). The nurses' quarters are still standing on the SRI campus, but the hospital buildings – a series of pavilion wards spread out across the site – have been demolished.



*Figure 10-27: Dibble General Hospital in Menlo Park*



*Figure 10-28: Nisei veterans at Dibble General Hospital*  
*Photo from Bancroft Library, University of California, Berkeley.*<sup>39</sup>

Very little building development unrelated to the war effort was possible due to shortages of labor and materials. Dibble General Hospital was the major medical property for this period in the local area. Many local physicians and nurses served at military hospitals in the U.S. and abroad, and these staff shortages further limited the possibilities for expansion of civilian medical facilities during this period. A number of physicians and residents of the Stanford Medical School (then located in San Francisco) served in Europe in the 59<sup>th</sup> Army Evacuation Hospital organized by the San Francisco General Hospital.<sup>40</sup>

There are no World War II era properties in the Stanford University Medical Center.

## **Post World War II Medical Facilities**

### *Megahospitals*

In spite of the huge economic and human cost of the war, the peace brought unprecedented growth in both population and the economy: creating demand for housing for veterans, new forms of industry, and an optimistic outlook on the future. A large population of wounded veterans sparked the transition from sprawling pavilion-style military hospitals to more efficient “minimalist megahospitals” in urban areas<sup>41</sup>. New development in the suburbs led to an expansion of the community hospital system as well. Planning for a national network of health facilities was supported by the passage of the Hospital Construction Act of 1946, known as the Hill-Burton Act.

*“The Hill-Burton legislation resulted in a series of overlapping rings laid out across the nation, with a large, typically urban teaching institution at the center of each ring and a network of support or satellite clinics and specialty hospitals...arrayed in outlying zones. The intent of the Hill-Burton Standards, which consisted of preset floor plans, room arrangements, bed capacities, and minimum standards for diagnostic and treatment departments, was to assist communities, health planners and architects to ensure minimum quality and content.”<sup>42</sup>*

Thousands of new hospitals were built in the period beginning with the passage of Hill-Burton in 1946 and ending with the shift in federal funding priorities (away from construction and towards programs) caused by the passage of Medicare and Medicaid in 1965.<sup>43</sup> The dominant style for these post-war hospitals was modern, particularly in the “International Style,” which favored flat roofs, minimal ornamentation and a “platform” or “podium” design with patient beds above below-grade service areas, a large ground floor housing administrative and public functions, and a monolithic high-rise concrete, steel and glass patient tower on top.<sup>44</sup> Narrow pavilion wards gave way to round, square, hexagonal, and triangular designs all focused on centralizing nurses’ stations and support rooms in a windowless “core” with patient rooms surrounding this core, to maximize the efficiency of building systems and staffing.<sup>45</sup> A proliferation of specialty departments filled adjacent auxiliary structures, or occupied a multi-story podium base.

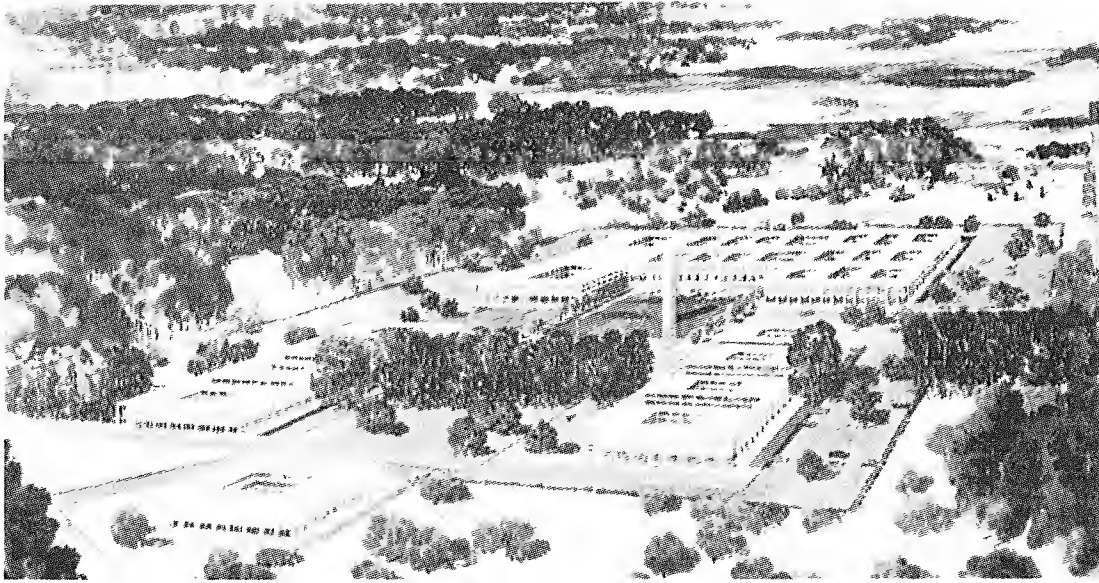
### *Outpatient Care Facilities*

Many new community physicians' offices in the post World War II period followed the modernist style. The trend towards group practices continued, and helped support the construction of modern medical office buildings and the demand for expanded use of on-site diagnostic equipment.

### *Post World War II Medical Properties in the Palo Alto Area*

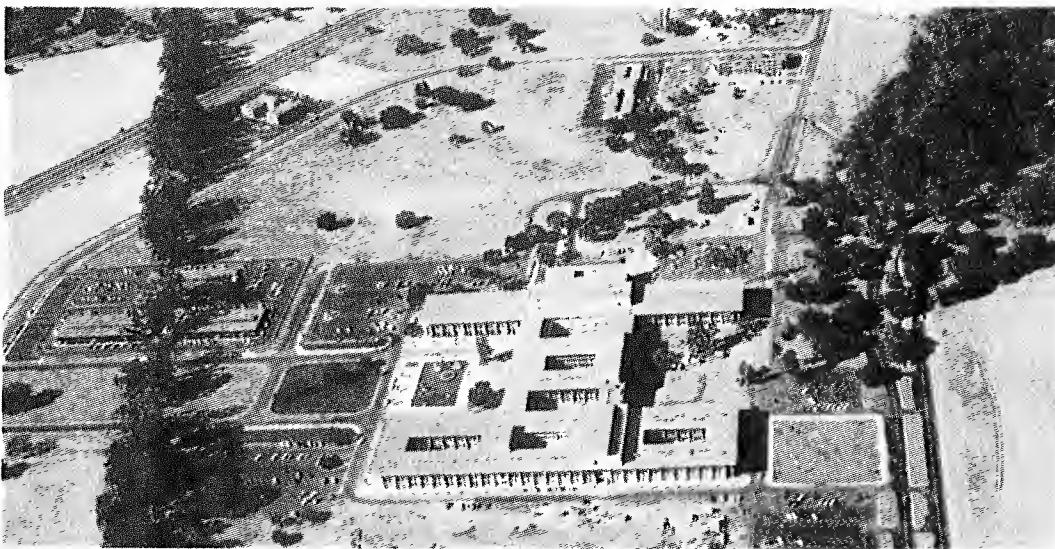
As local population expanded rapidly after the war, prominent local physician Dr. Russell Lee (co-founder of the Palo Alto Medical Foundation and one of the driving forces behind the 1930 Palo Alto Hospital project) proposed in 1947 a project to triple the size of the Palo Alto Hospital from 160 to 500-600 beds. His plan apparently was to raise the national profile of the Palo Alto Medical Foundation to rival the Mayo Clinics. The project would have required the expansion of the land area leased from Stanford University as well as approval by the University Trustees. Stanford's President, Donald Tressider, rejected the proposal, finding that the expansion did not serve the interests of the university.<sup>46</sup> Tressider was an alumnus of the Stanford Medical School and supported moving the medical campus from San Francisco onto the main campus. This plan was discussed by the University Trustees several times in the late 1940s, but stalled due to resistance from the medical faculty (many of whom had private practices in San Francisco).<sup>47</sup> Instead, plans were made to expand the school in San Francisco which stalled after Tressider's unexpected death in 1948 and an unsuccessful fundraising campaign for the new facilities.

In 1953, Stanford President J.E. Wallace Sterling and the Board of Trustees announced the decision to establish a medical school on the Stanford campus. Palo Alto had raised \$4 million for hospital expansion. A deal was struck in 1955 for a combined Stanford Medical School, Stanford teaching hospital and Palo Alto Hospital project on a 56-acre site near the center of campus. The two owners were represented by David Packard, as Chairman of the Stanford Board of Trustees and Palo Alto Mayor Noel Porter who appointed a Hospital Governing Board, led by William Hewlett and consisting of representatives of the medical school and local physicians. A complex set of business and building arrangements were negotiated and architect Edward Durrell Stone was hired in 1956 to begin design for the new Palo Alto-Stanford Hospital and Stanford Medical School (*Figure 10-29*).



*Figure 10-29: Stone's master plan*

The project was a “megahospital” by the standards of the period: a first phase of 475 beds (with a plan to expand to 1000) with two separate patient hospitals for Stanford and Palo Alto, shared laboratory and operating rooms, and teaching/research facilities for the Medical School. However, the requirement to separate the Palo Alto and Stanford hospitals and a city-wide height limit forced a horizontal plan, rather than the more popular podium-and-nursing tower arrangement. A sprawling complex of 3-story buildings in Stone's characteristic formalist modern style was completed in 1959 (*Figure 10-30*).



*Figure 10-30: The first phase of Palo Alto-Stanford Hospital and Stanford Medical School near completion in 1959*



The older Palo Alto Hospital facility was renovated and reopened in 1965 as the Hoover Pavilion, managed by the City of Palo Alto as a portion of its hospital facilities. New hospitals were also built nearby: the Sequoia Hospital opened in Redwood City in 1950, the Palo Alto Veterans' Administration Hospital on Foothill Boulevard was completed in 1960 (*Figure 10-31*).<sup>48</sup> El Camino Hospital also opened in 1960 in Mountain View.



*Figure 10-31: Palo Alto Veterans' Administration Hospital, 1960 (demolished)*<sup>49</sup>

The Palo Alto Medical Clinic also expanded in the post World War II period, acquiring offices in several locations in Palo Alto and building research facilities on Bryant Street in Palo Alto and a new clinic building (named for Russell Lee) adjacent to the Roth Building in 1961 (*Figure 10-32*). These facilities were demolished and the sites redeveloped for housing after the Palo Alto Medical Foundation moved to its current location in 1996.





*Figure 10-32: Palo Alto Medical Foundation, Lee Building (demolished)*

Many private medical practice offices opened during this period in Palo Alto and Menlo Park. Three professional office buildings built in this period are within the project boundaries and are proposed to be demolished: 701 Welch Road, 703 Welch Road and 1101 Welch Road. These properties are discussed in detail in a later section.

## ***Evaluation of Pre World War II Medical Facilities in the Project Area***

### **Hoover Pavilion/Palo Alto Hospital**

The Hoover Pavilion facility was constructed in 1930 to house the Palo Alto Hospital. The facility replaced the Peninsula Hospital, which was operated by Stanford from 1921-1931 under an agreement with the City of Palo Alto.<sup>50</sup> In 1927 the Palo Alto Medical Association formed a committee to study the requirements for a new hospital and in 1928; Stanford University President Ray Lyman Wilbur offered a 99-year lease for 10 acres of land on the Stanford campus for the new hospital, as well as an agreement for the university to manage the hospital.<sup>51</sup> The City of Palo Alto raised more than \$400,000 in construction costs from a combination of bond funding and donations. Construction of

the central tower and original 80-bed hospital was completed in 1931; an attached 80-bed addition (the “east wing”) was completed in 1939.

*Criteria 1, 2: Association with Significant Events or Persons*

The Palo Alto Hospital was a community hospital that treated thousands of patients over the more than four decades of its operation. It was not a medical research facility and no major events in the history of medicine are associated with the building. President Herbert Hoover, for whom the property was named in 1965 (Hoover died in 1964), had no documented relationship to the Palo Alto Hospital. A sometime resident of the Stanford campus, he may have contributed to the fundraising campaign and may have visited the facility but as he was President during its design and construction, it is unlikely he played any role in the project itself.<sup>52</sup> While many dedicated physicians, nurses and staff worked in the building over the years, history has not identified a particularly significant person among them.<sup>53</sup> The Hoover Pavilion/Palo Alto Hospital does not appear to be eligible for listing on the California Register for association with significant events or persons.

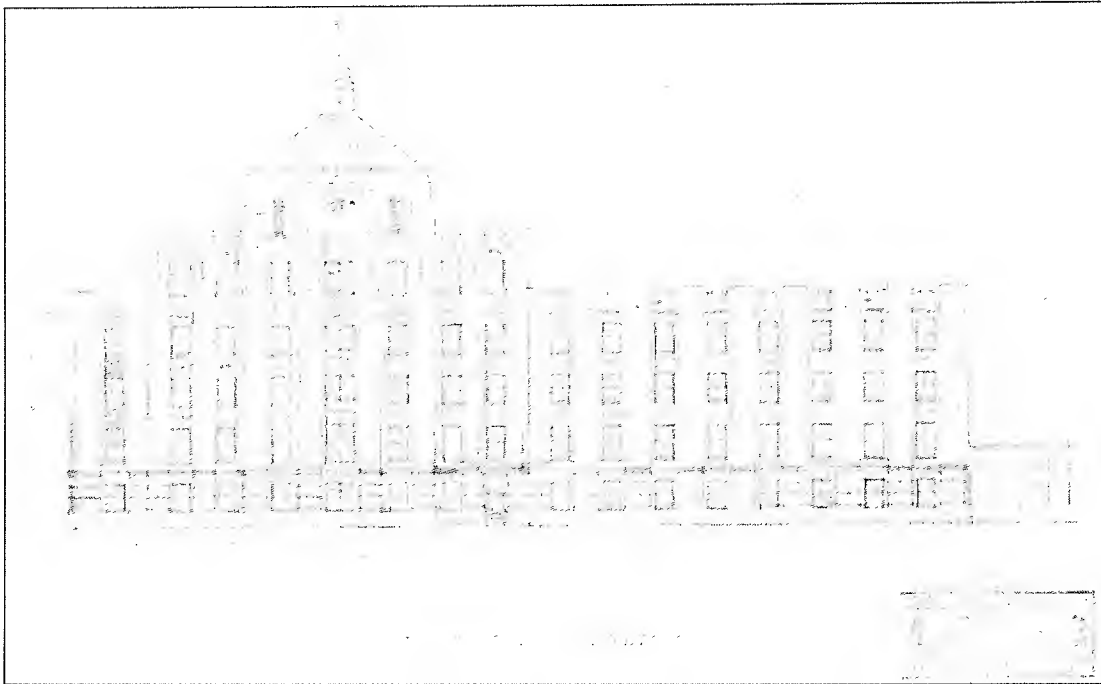
*Criterion 3: Design*

Within the historical context outlined above, the building may be potentially eligible for listing under criterion 3 as an important example of pre World War II hospital design, if it “embodies the distinctive characteristics” of hospitals of the period. As noted above, the trend during the early 20th century was towards construction of high rise hospitals, in contrast to the low spreading pavilion plans of the past. Furthermore, hospitals became civic institutions during this period – built by cities and counties to support growing populations and attract businesses to their communities. Generally, beaux arts style hospital buildings were popular before World War I, with art deco styles gaining between the wars.

In the era before medical insurance, hospitals provided a variety of room types for a range of fees; floor plans reflected this with a more complex set of ward layouts than in earlier hospitals. Despite this, the floors of high rise hospitals continued to follow pavilion principles: fresh air and sunlight were highly valued, visitor movement through the building highly controlled, and nursing stations and sanitary facilities concentrated in one area on each floor. Hospitals of the 19th century had laundries and kitchens, hospitals of the twentieth century added flower rooms, and a focus on staff comfort (staff locker rooms, bedrooms, dining rooms) to assist recruitment and retention in a period of short supply for quality medical personnel. Typically the building’s vertical organization went from service in the basement or ground floor, to public spaces (reception and admitting, gift shop, waiting lounges, offices) on lower floors, several floors of nursing wards, and finally the surgical rooms at the top (minimizing traffic flow into these areas).

The Palo Alto Hospital closely followed these trends. The building is a high-rise structure (at six stories it was one of the tallest buildings in the city at that time). The tower has a “ziggurat” roofline: stepping back in a series of flat terraces with a pyramidal hipped roof originally surmounted by an elaborate copper lighting rod cap (*Figure 10-*

33). The ziggurat form is strongly art deco, perhaps the best known example being the Empire State Building (1931) in New York (*Figure 10-34*).

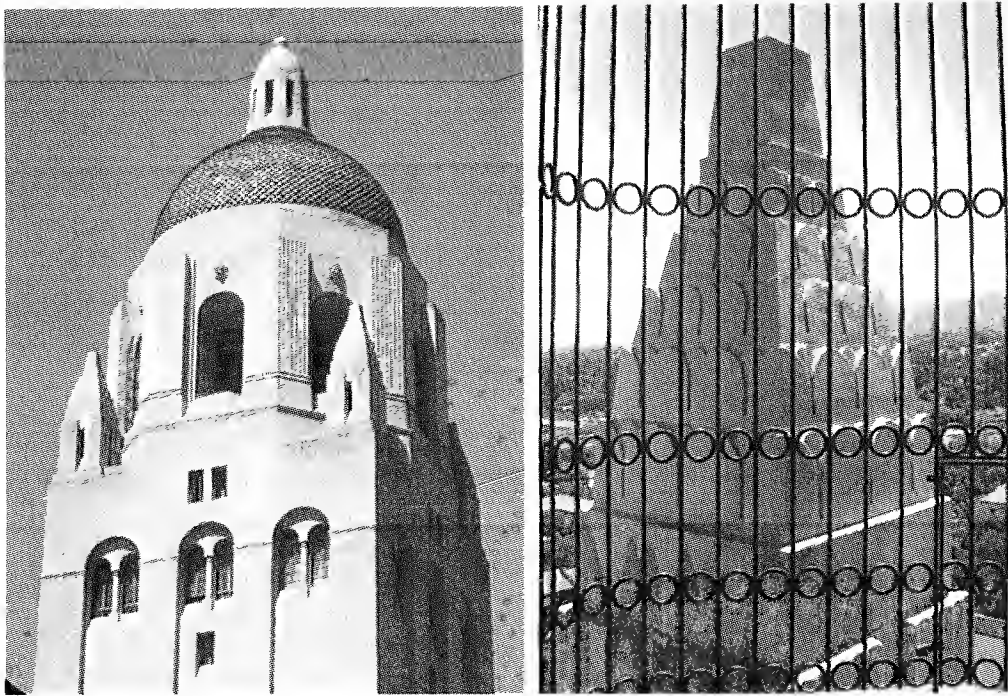


*Figure 10-33: Palo Alto Hospital, 1930, northwest elevation*



*Figure 10-34: Empire State Building, New York, circa 1930s<sup>54</sup>*

The Hoover Pavilion/Palo Alto Hospital may be the only ziggurat profile building in Palo Alto, which has only a handful of art deco structures. Interestingly, there are two Stanford buildings with small ziggurat decorative elements, both associated with Herbert Hoover: the Hoover Tower (1940) has small ziggurats on the corners of the observation deck level (*Figure 10-35*), and the Lou Henry Hoover House (1919-20) has a number of stepped decorative elements (*Figure 10-36*). While there is room for debate on whether Hoover Tower and Lou Henry Hoover House are art deco buildings, the use of exotic architectural forms – Greek, Assyrian, Egyptian, Mayan, Aztec, Native American Pueblo – is a feature of the art deco movement.<sup>55</sup> Ziggurats are associated with the ancient civilizations of the near east, in the present nations of Iraq and Iran (*Figure 10-37*).



*Figure 10-35: Hoover Tower (1941), detail of ziggurat*



*Figure 10-36: Lou Henry Hoover House (1920)*

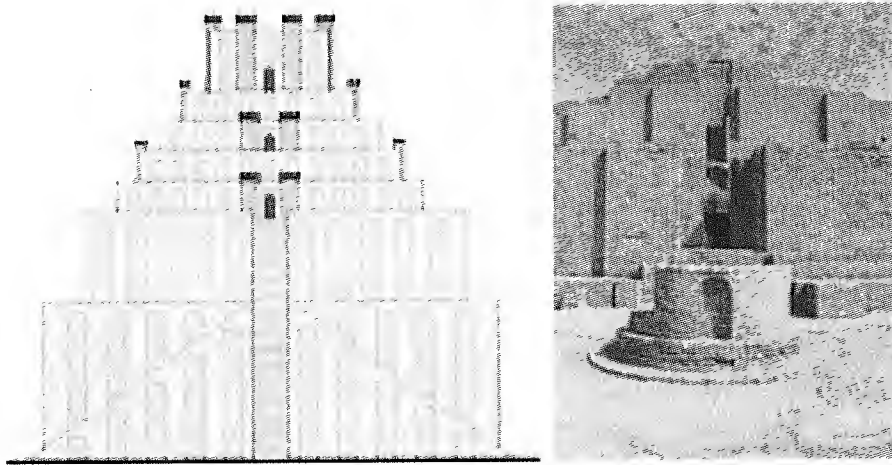


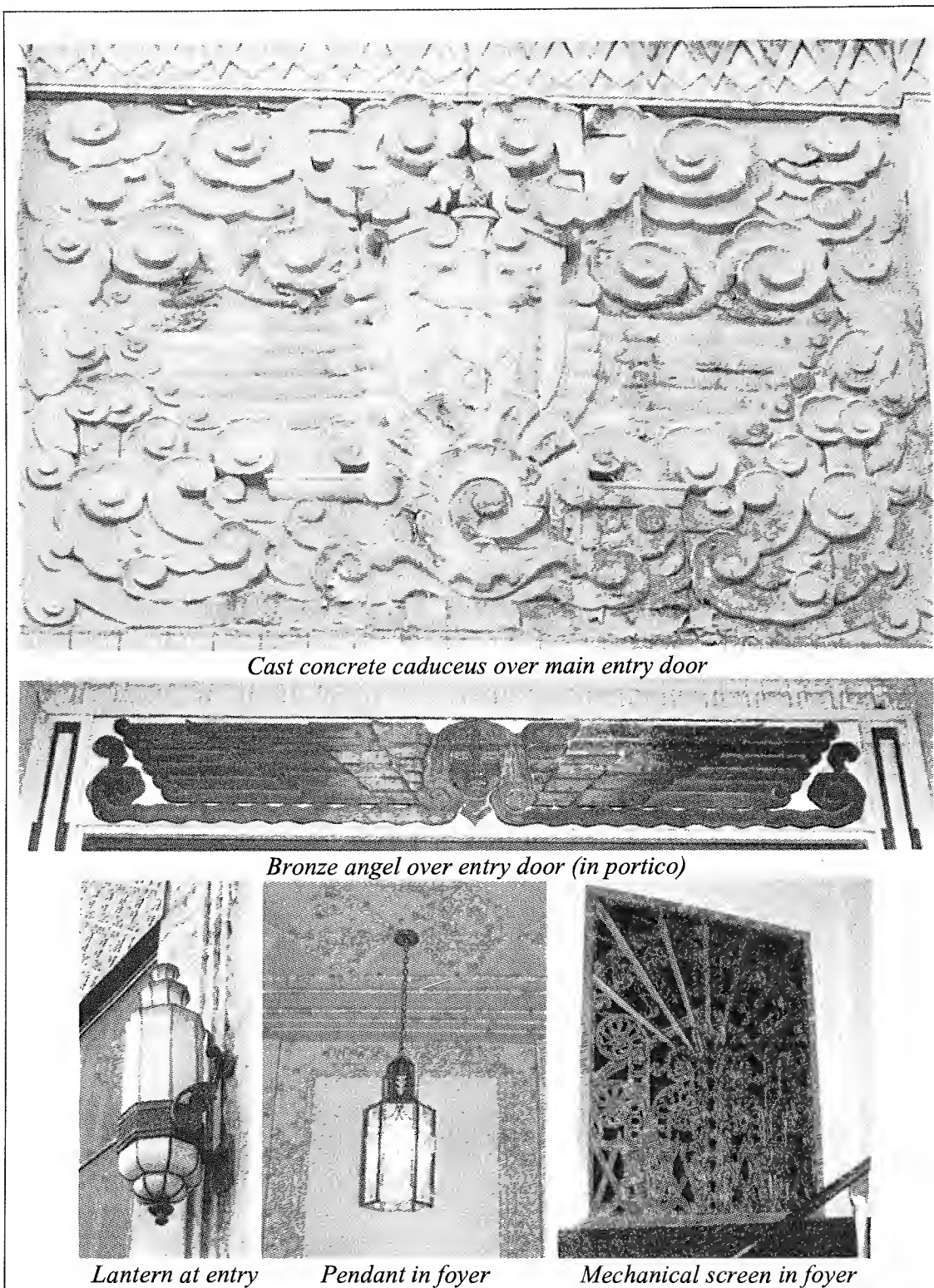
Figure 10-37: Mesopotamian ziggurats<sup>56</sup>

Art deco has a number of variants, but the Hoover Pavilion/Palo Alto Hospital displays the characteristic features of its most common form:

*“The most distinctive form of art deco architecture was what is now referred to as ‘zigzag moderne’ – the exotically dynamic style of such skyscrapers as the Chrysler and Empire State buildings. The description ‘zigzag’ refers to the geometric and repetitive stylized ornament of zigzags, angular patterns, abstract animal and plant motifs, sunbursts, astrological symbolism, frozen fountains and related motifs that were applied richly in metalwork, mosaic, etched glass, sculptural relief, and mural form to the exterior and interior of the buildings, many of which were ziggurat-shaped.”<sup>57</sup>*

Will Corlett, one of the principal architects for the Palo Alto Hospital, insisted that the design was simple and unadorned; the two bands of terracotta window spandrels, elaborate screen work on the roof level and elaborately detailed parapet belie this statement. These details are consistent with art deco design of the period, and in the San Francisco Bay region.<sup>58</sup> The main entry on Palo Road is particularly ornate ((Figure 10-38). The entrance has a custom cast concrete friezes with a stylized caduceus (a short rod entwined by two snakes flanked by a pair of wings; associated with the Greek god Hermes and the healing arts). The entry portico is surmounted by an art deco bronze angel, almost certainly also a reference to the function of the building. The main entry has other art deco decorative elements, including lighting fixtures and screens. The awning over the original ambulance entrance on Quarry Road is also detailed in typical art deco fashion (Figure 10-39).





*Figure 10-38: Art Deco ornament on the Hoover Pavilion, Palo Road entry*



*Figure 10-39: Art Deco awning on Quarry Road façade, terracotta spandrels above*

The interior plan of the building closely follows the period as well: the ground floor of the 1930 wing housed the emergency room and service functions: staff locker rooms, laundry, sewing room, mattress storage, commissary storage the morgue (the ground floor of the 1939 addition contained patient rooms). The second floor of the 1930 wing, the main entry on the northwest façade, led to the lobby, cashier, administrative offices, laboratories, kitchen, staff dining room, doctor's coat room, and bedrooms for nurses, interns and the hospital superintendent (the 1939 wing is also patient rooms). The fourth floor housed patient rooms and the nursery (two additional labor and delivery suites were added in the 1939 addition on this floor) and the fifth floor had three operating rooms, labor delivery rooms, an anesthesia room and staff preparation spaces. The sixth floor or "penthouse" contained only mechanical rooms. This reflects a typical vertical organizational arrangement, reflecting social distinctions of the period and functional concerns.<sup>59</sup> This relatively small hospital had few spaces for families and visitors – the cafeterias, gift shops and large waiting areas are a later phenomenon. The interior plan is a good example of a hospital of the pre World War II period.

The Hoover Pavilion/Palo Alto Hospital is less elaborate in its art deco ornament than the most outstanding examples of the style, such as the Los Angeles County Hospital. However, the form and detail of the exterior are good examples of the art deco zigzag moderne style and compare favorably with many large art deco hospitals of the time. The building appears to meet the condition of the criterion 3 as exemplifying the distinctive characteristics of a Pre World War II hospital, including the use of the art deco style and the functional design of the property.

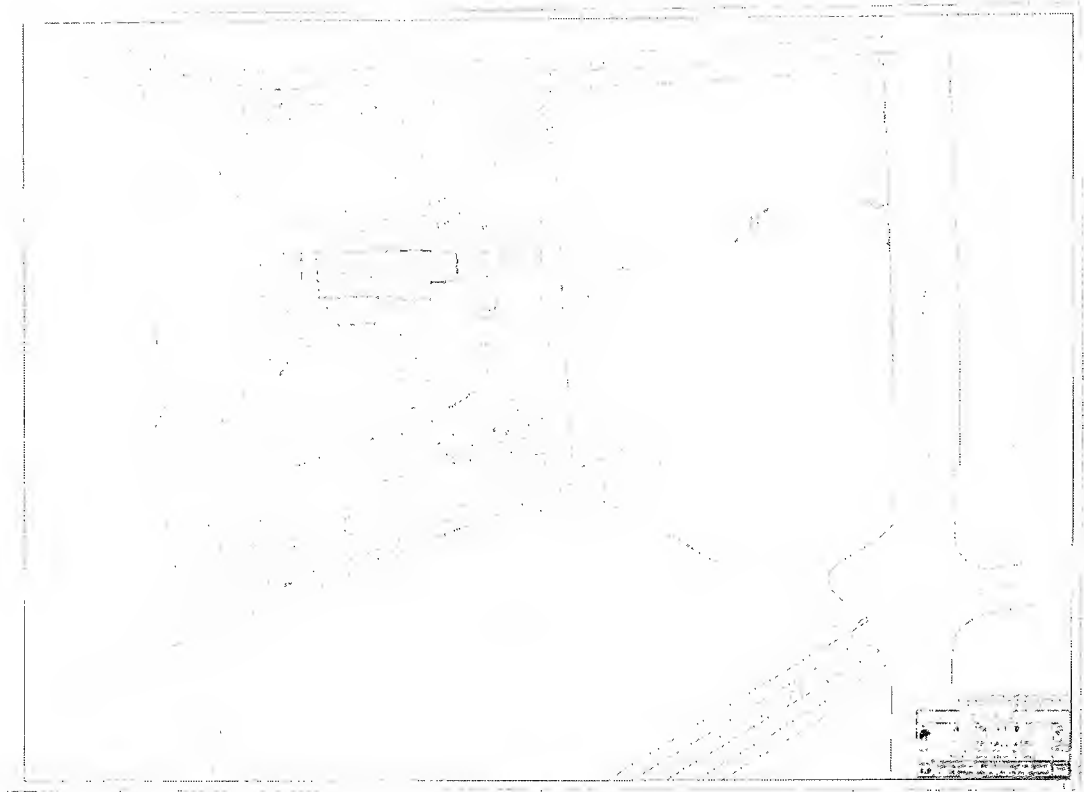
#### *Criterion 4: Information Potential*

The Hoover Pavilion does not appear to have the potential to yield important information in history or prehistory. This criterion is typically applied to archaeological sites or examples of unusual construction methods for buildings or structures. The Hoover Pavilion is not eligible for listing under criterion 4.

#### *Integrity*

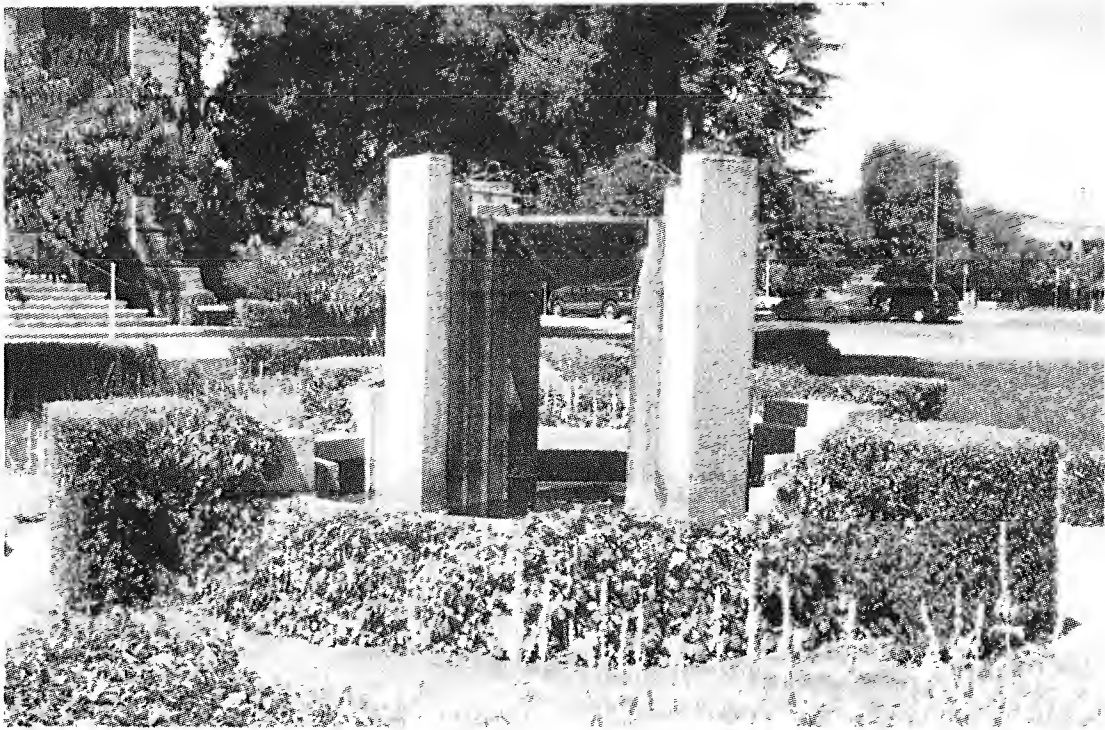
As the Hoover Pavilion appears to meet criterion 3, the further step of evaluating the physical integrity of the character-defining features is necessary to make a determination of historical significance. Integrity is the ability of the property to convey the reasons for its significance. The Hoover Pavilion has a fairly high level of integrity for its exterior art deco features and original building materials. The interior floor plan is substantially similar and the windows, stairwells and main entry have retained historic finishes. However, decades of interior remodeling have altered the interior finishes to such an extent that the sense of being inside a historic hospital is compromised in many of the spaces: patient rooms have been converted to offices, and the remaining medical treatment areas are thoroughly modern in character. The high level of integrity and strong character of the exterior features including the ziggurat roof profile, ornamental concrete and tile, and largely intact windows and entry give a strong sense of historical style and period to the exterior. The integrity of the characteristic zigzag moderne features of the exterior is adequate to convey the feeling of the period and its architectural interest.

The integrity of the setting is also mixed. The setting was chosen for its proximity to the town and for its beauty: "One can walk from the entrance of Palm Drive to the hospital site in about six minutes and it can be reached from University Avenue by car in about five minutes. The site is secluded from all undesirable sights and noises. The physical surroundings are beautiful and there are no neighbors to object to its presence."<sup>60</sup> The original landscape plan was extremely simple: road access, parking lots and existing trees. There are no plans showing the Fountain Plaza at the main entry, however, a plaza appears indistinctly in aerial photographs from the 1940s and may have been added with the 1939 addition. While the construction date for the fountain feature is not known, it is art deco in style: a low stepped concrete basin surrounding four vertically stepped columns supporting a shallow copper basin. Its surfaces, however, lack the rich ornamentation of the building façade – no cast ornament or decorative tile – which may indicate a later construction date than the building. (*Figure 10-40*).



*Figure 10-40: Site Plan for Palo Alto Hospital, 1930*

The site was planted with ornamental trees immediately adjacent to the building in the early 1960s: formally arranged in the rear courtyard, and against each of the building's pilasters. Lawn was added during this period, much of which was later removed (*Figure 10-41*). The rear, southeast side of the site has been used for support functions and a number of vernacular service buildings have been added and removed over time. Much of the setting is utilitarian and institutional in character: paved surfaces, unirrigated expanses of bare ground, overgrown vegetation and simple outbuildings. There is no designed landscape of note other than the fountain plaza. In terms of integrity, the entry plaza is intact and the overall setting which has always been lightly wooded continues to display this character.



*Figure 10-41: Art Deco fountain plaza on Palo Road*



*Figure 10-42: Northwest façade, 1977*

The Hoover Pavilion/Palo Alto Hospital appears to be historically significant, displays substantial integrity of its defining zigzag moderne exterior features and may be eligible for listing on the California Register under Criterion 3.

### **Nurses' Cottage**

The Palo Alto Hospital operated under continual pressure to expand. Stanford's President Ray Lyman Wilbur reported in 1941 that "A comparison of the five-year period from 1932 to 1936 with the five-year period from 1937-1941 (inclusive), shows 12,829 units of service in the first period and 26,099 units in the second period, or an increase of approximately 100 per cent."<sup>61</sup> The hospital doubled its number of patient beds with the opening of the addition in 1939, but pressure to increase lab and x-ray facilities and administrative offices for the larger hospital led to the construction of a new facility for bedrooms and locker rooms for nurses to free up space in the main hospital building. Like the Palo Alto Hospital, the Nurses' Cottage will also be evaluated using the criteria for listing on the California Register of Historic Places, in the context of developments in medical facilities during the pre World War II period (the facility was planned and the first wing constructed before the war; completion was delayed by material and labor shortages during the war).

#### *Criteria 1, 2: Association with Significant Events or Persons*

The Nurses' Cottage was not the scene of any significant historical events, nor has any of the occupants achieved notoriety. In fact, despite a substantial historical literature on the contribution of women to the history of medicine, largely through careers in nursing, there is little historical record of the lives of the nurses who worked at the Palo Alto Hospital. The donor who paid for the construction of the cottage was a well known local philanthropist: Lucie Stern. Lucie Stern inherited a considerable portion of the Levi Strauss fortune from her husband, Louis Stern, and was "Palo Alto's fairy godmother" during the depression years.<sup>62</sup>

Lucie Stern made major gifts to Stanford University, including a dormitory (Stern Hall) and a number of endowed professorships. She is perhaps best remembered for her gift of the Community Center and Theater on Middlefield Road that bear her name (they were completed in 1933). These structures, and an annex given by her daughter Ruth Stern, were also designed by Birge Clark and continue to play a vital role in the cultural life of the community (*Figure 10-43*). The gates to Mrs. Stern's Atherton Home, Hyde-A-Whyle, have been listed in the town's Historical Landscape Artifact Inventory.<sup>63</sup> Mrs. Stern and her daughter Ruth also had homes in Palo Alto, designed by Birge Clark and listed on the Palo Alto Historical Inventory. Another Lucie Stern gift to the community (in 1941) that has sparked preservation interest is the art deco "streamline moderne" Sea Scouts Building on San Francisco Bay, planned for restoration by the Environmental Volunteers.

When a person is associated with a number of surviving properties, their relationship to the properties must be reviewed to determine which best represent their contributions to history:



*Each property associated with an important individual should be compared to other associated properties to identify those that best represent the person's historic contributions...Length of association is an important factor when assessing several properties with similar associations.<sup>64</sup>*

Lucie Stern's association with the Community Center, Theater, Children's Theater and Children's Library on Middlefield Road was long-lasting and is well-remembered in Palo Alto. The Nurses' Cottage, while a generous gift, does not carry the strength of association – in scale, length of time, or public memory -- of Mrs. Stern's major contributions to Palo Alto and Stanford. The Nurses' Cottage therefore does not appear to be eligible for listing on the California Register under criteria 1 or 2.

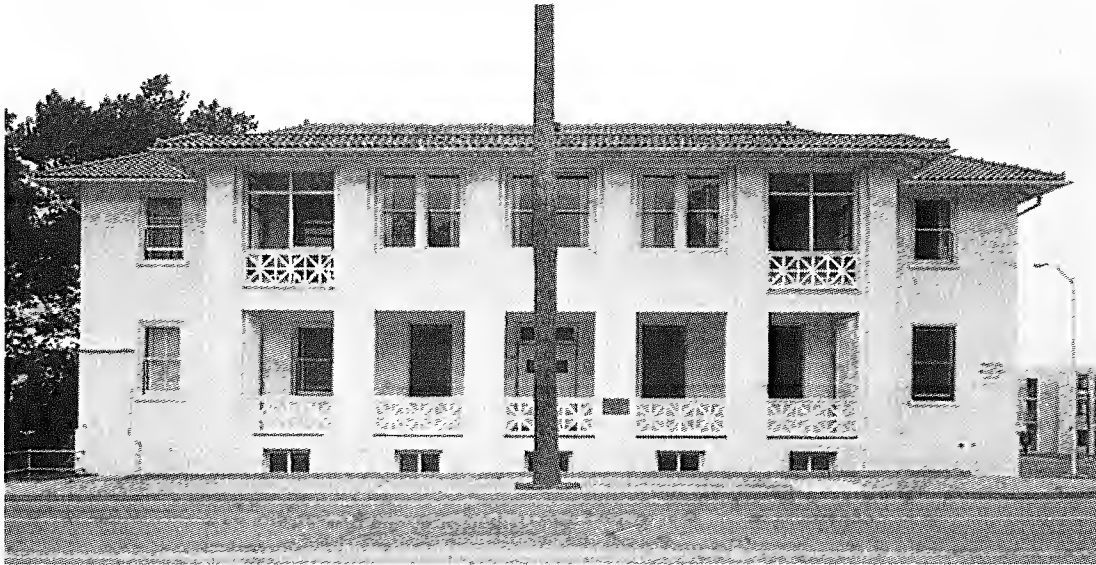


*Figure 10-43: Lucie Stern Community Center<sup>65</sup>*

### *Criterion 3: Design*

As mentioned above, housing for nurses was a common feature of pre World War II hospitals. Most nurses were unmarried young women, working long hours and hospital administrators of the period believed they needed supervision and security. Housing was also a recruitment tool for nurses in an era of chronic nursing shortages. The San Francisco Hospital Nurses Home was described as “a three story brick structure with every modern convenience to make home life of the student nurses comfortable. The

grounds surrounding are attractive with lawns and gardens.”<sup>66</sup> The Nurses’ Quarters at Letterman General Hospital in San Francisco are typical: there are reception areas, sitting rooms, and dining rooms as well as sleeping facilities (*Figure 10-44*). The Nurses Home at Agnews State Hospital in Santa Clara was similar in style and plan to the Letterman Nurses’ Quarters: graceful Mediterranean revival architecture with domestic scale common rooms on the ground floor (*Figure 10-45*). Early 20th century nurses’ homes display a variety of residential architectural styles, however, the focus on providing the comforts of home in a pleasant setting are key defining characteristics.

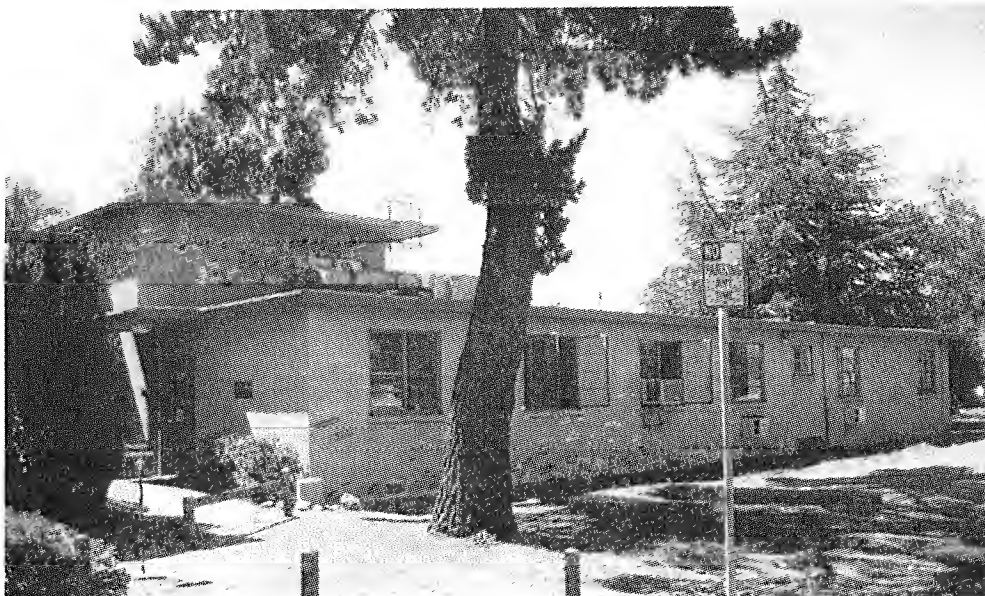


*Figure 10-44: Nurses’ Quarters, Letterman Hospital, San Francisco (1932)*<sup>67</sup>



*Figure 10-45: Nurses’ Home, Agnews State Hospital, Santa Clara (demolished)*<sup>68</sup>

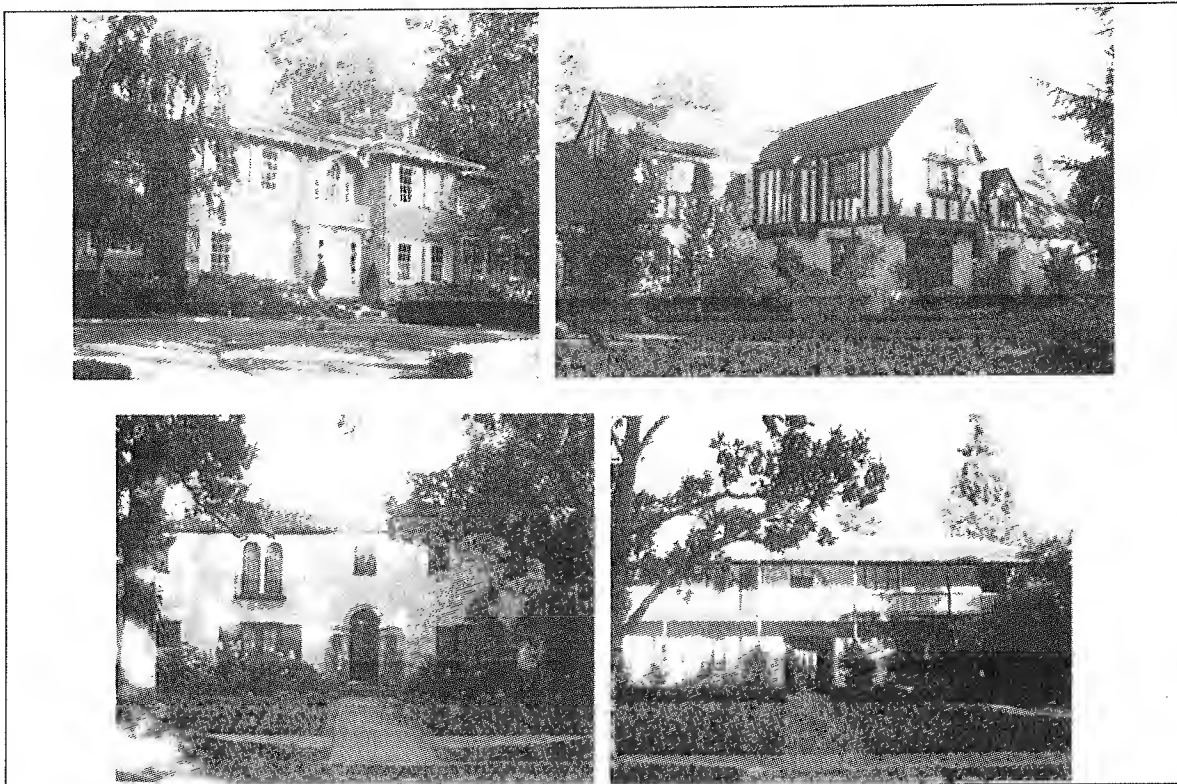
The Palo Alto Hospital Nurses Cottage was designed by Palo Alto architects Birge Clark and David Clark in 1941. Birge Clark and Walter Stromquist designed a 1948 addition to the building as well (*Figures 10-46, 10-47*). The building's stripped-down modern style is a departure from Clark's well-known Spanish colonial revival style that characterizes many of his projects in Palo Alto, including the Palo Alto Medical Foundation's Roth Building, the Cardinal Hotel, the Lucie Stern Community Center and the Hamilton Avenue United States Post Office as well as dozens of private homes (*Figure 10-48*).



*Figure 10-46: Palo Alto Hospital Nurses Cottage, Quarry Road façade*



*Figure 10-47: Palo Alto Hospital Nurses Cottage*



*Figure 10-48: Birge Clark Houses in Palo Alto*

Clark and Stromquist designed other modern buildings in the 1940s all modest horizontal structures accented by modernist bands of windows: the Palo Alto Red Cross building at 400 Mitchell Lane (1947), a number of public school buildings and a commercial building at 900 High Street (*Figure 10-49*). There are apparently also some modern style private homes by Birge Clark, though these are less well known.<sup>69</sup> The building at 900 High Street is listed in the Palo Alto Inventory; however a recent survey found the Palo Alto Red Cross building ineligible for listing on the California Register.<sup>70</sup> The Nurses' Cottage at the Hoover Pavilion/Palo Alto Hospital is a modest building, both in the context of nurse housing and in the career of Birge Clark. It does not appear to be eligible for listing on the California Register of Historic Places under criterion 3.





*Figure 10-49: Peninsula Creamery Building at 900 High Street (Birge Clark)*

#### *Criterion 4: Information Potential*

The Nurses' Cottage does not appear to have the potential to yield important information in history or prehistory. This criterion is typically applied to archaeological sites or examples of unusual construction methods for buildings or structures. The Nurses' Cottage is not eligible for listing under criterion 4.

As the Nurses' Cottage does not meet any of the four criteria for listing on the California Register, it does not appear to be a significant historical resource.

### ***Evaluation of Post World War II Medical Facilities in the Project Area***

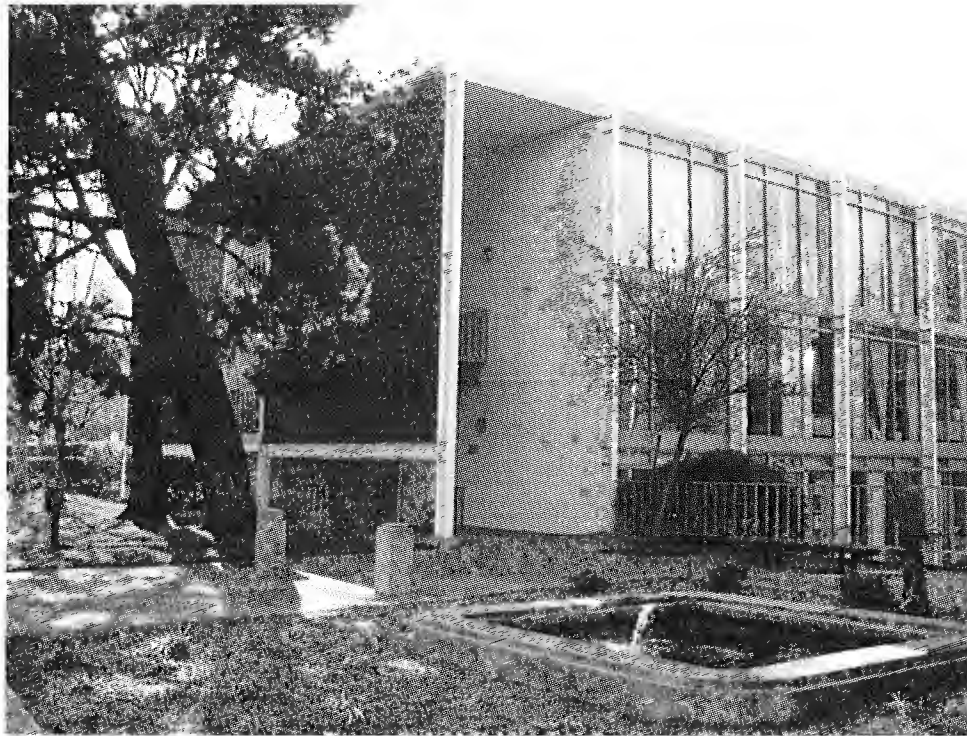
#### **Historical Significance and the Recent Past**

Many of the post World War II properties affected by the proposed project were constructed in the past fifty years. In order to achieve historical significance in this short time frame, it is interesting to note that the National Register of Historic Places guidelines suggest that a property less than 50 years old should be of exceptional importance. The higher level of significance "guards against the listing of properties of passing contemporary interest and ensures that the National Register is a list of truly

historic places.”<sup>71</sup> The California Register allows listing of properties less than fifty years old where “sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource.”<sup>72</sup> The California Register criteria are applied in this analysis.

With regard to modern architecture, there is a growing body of scholarly work documenting post World War II buildings. In 2000 the U.S. General Services Administration, Advisory Council on Historic Preservation, the American Architectural Foundation, the National Trust for Historic Preservation and the Yale School of Architecture held a symposium with more than 75 leading architects and preservation experts at Yale University on “Architecture of the Great Society,” resulting in a report titled “Growth, Efficiency and Modernism: GSA Buildings of the 1950s, 60s and 70s,” which contains a framework for assessing the eligibility of modern buildings for historical listing.<sup>73</sup> This framework, used within the context of medical facilities design, will guide the evaluation of the post World War II medical facility properties affected by the proposed project.

### **701 Welch Road, Whelan Buildings**

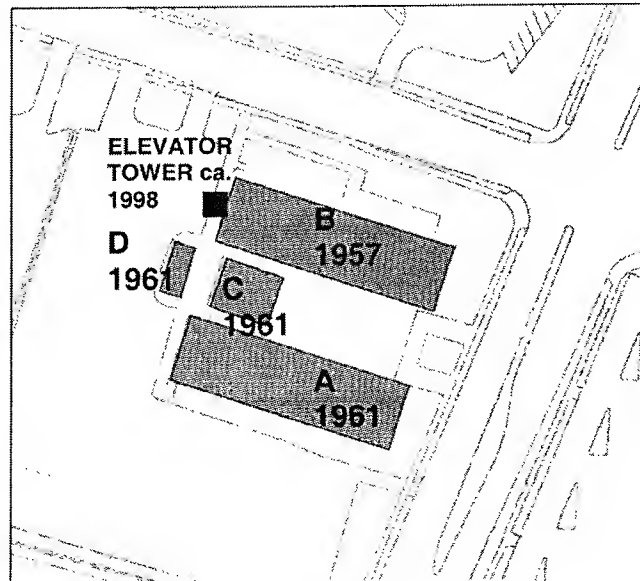


*Figure 10 -50: 701 Welch Road, Building A*

There are five structures currently located at 701 Welch Road: four structures dating from the 1957-61 original development of the property (701A, 701B, 701C, 701D), and a



recent added elevator tower (*Figures 10-50, 10-51*). The property was developed as a professional office building complex by John Whelan, who received a lease from Stanford University for 1.4 acres in 1957. His brother Joseph Whelan owned the construction company that built Buildings A, B, C, and D. The buildings were described as “professional office” buildings and upon completion of the complex in 1961 housed a variety of tenants, including physicians, psychologists and dentists as well as lawyers, engineers and accountants.<sup>74</sup>



*Figure 10 -51: Site development sequence at 701 Welch Road*

The buildings sit at the corner of Welch and Quarry Roads, across Welch Road from the Stanford Shopping Center Barn. Buildings A and B are three stories in height, with a half story below grade (they were built under a 35 foot height limit), Building C is two stories and D is a single story. There is a sunken courtyard between Buildings A, B, and C.

#### *Criteria 1, 2: Association with Significant Events or Persons*

The only newsworthy event in the record for the property was the establishment of the Addiction Research Foundation by Dr. Avram Goldstein in 1974. His neighboring tenants complained vociferously about the odors from his laboratory and the appearance and behavior of his patients and within a few years Dr. Goldstein relocated his foundation.<sup>75</sup> The activities of the Foundation attracted only minor public notice and occurred relatively recently, and thus cannot be said to achieve historical significance. The buildings housed a variety of professional tenants. There are no historical events associated with the buildings that merit consideration under criterion 1.

The list of tenants from the early 1960s was reviewed against newspaper clippings and local historical sources.<sup>76</sup> For example, among the tenants of a law office in 1961

were Richard Blois and Marsden Blois. Richard Blois is a Stanford alumnus who together with his wife Susan have been active in campus and civic affairs. Marsden Blois was a lawyer and an instructor at the Stanford University School of Law. The Whelan brothers, developer John Whelan and contractor Joe Whelan, had their offices in the buildings as well. The activities of these citizens leave traces in local newspapers, but none of the tenants of the buildings from the early 1960s appears to have achieved wider fame or notoriety. Dr. Goldstein has enjoyed an impressive career; however, the strength of his association with this property is weak: he was only a tenant for a few years of his long career, and his tenancy occurred within the last 35 years. The buildings at 701 Welch Road do not appear to be eligible for listing on the California Register under criterion 2.

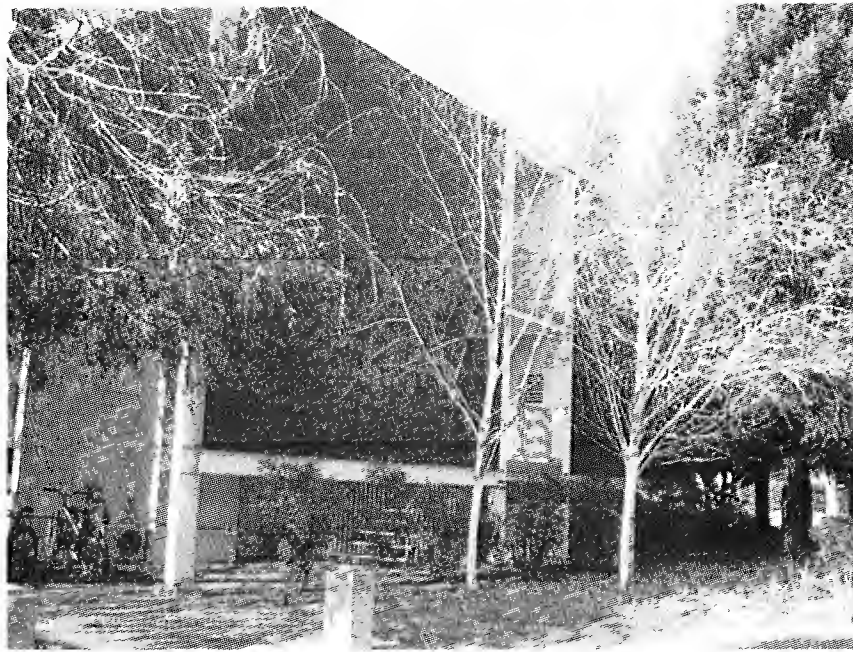
### *Criterion 3: Design*

Buildings A, B, C, and D were designed by architect Don Knorr (1923-2003), a modernist architect who practiced in the San Francisco Bay Area from 1949 to his retirement. In the early years of his career, Knorr worked for the father-son architecture firm of Eliel and Eero Saarinen in Michigan and later joined the San Francisco firm of Skidmore, Owens and Merrill before launching his own practice, Knorr Elliott Associates, in 1951.<sup>77</sup> Knorr's work received some notice during his career: he won a MoMA furniture competition in 1950 (for a metal chair he designed – *Figure 10-52*) and one of his house designs was chosen by the prestigious Case Study Houses project in 1957 (though never built).<sup>78</sup> Knorr did several projects with builder/developer Joe Whelan, including houses for Whelan in Atherton and the Portola Valley Ranch development.<sup>79</sup> Knorr is best known for his minimalist modern furniture designs from the early 1950s, and for minimalist modern houses of glass, steel, wood and adobe built for affluent clients in Atherton, Woodside, Portola Valley and other northern California suburbs.<sup>80</sup>



*Figure 10-52: Chair by Don Knorr for the Knoll Company (1948)<sup>81</sup>*

Knorr's design for the office buildings at 701 Welch Road uses some of the ideas from his Case Study House proposal: tall blank redwood walls at stark right angles to walls of steel and glass, and a sunken garden (*Figures 10 -53, 10-54*).



*Figure 10 -53: 701 Welch Road, Building B, West facade*



*Figure 10 -54: 701 Welch Road, Building B, South façade*

The original landscape designer for the project was Lawrence Halprin, but the final plans approved in 1961 were by Sasaki, Walker and Associates. These plans included a small water feature, a putting green in the sunken garden, and trees planted to screen the window walls.

As the buildings are for the most part less than 50 years old (Building B, the first to be completed, was occupied in 1957, the others followed in Phase 2, completed in 1961), a scholarly perspective is important in reviewing their significance. As noted above, recent scholarship has recognized Don Knorr as an important modernist designer. To evaluate this particular project, a scholarly perspective is provided by the national report *Growth, Efficiency and Modernism* which summarized the findings of a panel of eminent scholars and architects regarding architecture of the post war period. The questions below are taken from the assessment tool included in this report.<sup>82</sup>

*Is it a formative design in the portfolio of a prominent architect whose work had an important influence on a community, region, state, or country?*

Based on its resemblance to the Case Study House #19, submitted the year Building B was completed in a similar style, it appears to be a formative design in Knorr's portfolio. Knorr himself mentions that it was one his first experiments with steel construction.<sup>83</sup> However, Knorr's practice was small and his projects far flung across the San Francisco Bay Area which limited his influence on the region.

*Is it a highly influential or outstanding work or is it a lesser work in the portfolio of a master architect?*

Knorr's most influential projects were residential, not commercial, and his influence on the region was limited by the small size of his practice.

*Is it a successful example of a Modern-era style such as Expressionism, Formalism, or Brutalism?*

No. It was, however, with its strongly horizontal form, clean lines, and common construction materials a good example of a regional style described variously as "Northern California Modern" or Soft Modern."

*Does it exemplify the Modernist design philosophy, making effective use of modern materials, components, public artwork, noteworthy landscaping or site design?*

Knorr's best known projects included unusual combinations of materials, such as adobe and steel or colored glass and ceramic panels by his artist wife, Anne. Here, the landscaping is not remarkable. The buildings make effective use of steel, concrete block, redwood and glass, but fail to make a strong visual statement.

*Are interior and exterior significant spaces fully intact as designed, with original materials and features?*

No, there have been major modifications to the buildings since their completion in 1961, described below in the discussion of integrity.

The buildings at 701 Welch Road are interesting modern buildings by an obscure but talented architect. However, they are conventional, severely plain, rectangular office buildings with little to draw public notice or interest in their design. They do not appear to achieve the level of importance required for listing on the California Register under criterion 3.

#### *Criterion 4: Information Potential*

The Whelan Building does not appear to have the potential to yield important information in history or prehistory. This criterion is typically applied to archaeological sites or examples of unusual construction methods for buildings or structures. The Whelan Building is not eligible for listing under criterion 4.

#### *Integrity*

The clean design of the building complex, and the strong mirror symmetry of its main two buildings (A and B) was permanently compromised by a series of alterations beginning in 1969 when the glass curtain walls on Building A were moved outward to the edge of the roof eaves, and a covered porch at Building C was enclosed to create additional interior space. Stanford's Director of Planning, Harry Sanders, strongly disapproved of this change, writing that

*I find it difficult to accept the random filling in of such covered outdoor spaces, particularly in these small intimate courtyards. And this court as pavilion depends very much on having this covered porch area. Bringing the glass wall out to the overhang would, in my opinion, be unfortunate...I guess the reason I feel so strongly is that I think the Whelan Buildings are among our best, and I'd hate to see them head downwards.*<sup>84</sup>

Despite this warning, the alterations were approved, disrupting the symmetry of the buildings (*Figures 10-55, 10-56*). Five years later another controversy erupted when the Whelans complained about alterations to Building A (at this point they had transferred the leases on some of the buildings to another developer). Gail Whelan wrote the university president, Richard Lyman, stating that the alterations were "extensive, tasteless and dangerous...The outstanding appearance of these twin buildings, standard-bearers on Welch Road is also, in my opinion, being thoroughly ruined."<sup>85</sup>





*Figure 10-55: 701 Welch Road, Original window configuration, Building B*



*Figure 10-56: 701 Welch Road, Windows extended to eaves, Building A*

Again in 1979, when a proposal emerged to add a new doorway on the south east façade of Building D, the Whelans complained. John Whelan described it in a letter to the university's Manager of Real Estate as a "violent alteration to the architectural expression of these buildings."<sup>86</sup> The addition of a round elevator tower in 2001, and the re-glazing of many windows in tinted glass, further compromised the overall composition.

Due to this series of changes that disrupted the unity of Knorr's original plan, the buildings at 701 Welch Road do not appear to retain integrity of design. As the buildings at 701 Welch Road do not meet any of the four criteria for listing on the California Register, and have lost integrity of design, they do not appear to be a significant historical resource.

### **703 Welch Road, Welch Road Professional Center**



*Figure 10-57: 703 Welch Road*

The building at 703 Welch Road is next door to 701 Welch Road. This building is a complex created by two long narrow buildings joined at each end and in the center by connective elements, creating two lines of professional offices that opened onto a narrow inner courtyard (*Figure 10-57*). The building steps from one to two stories in height (the second story was a later addition). The first phase of the building was completed in 1958 by Welch Road Properties, led by developer J.P. Aced. The second phase, addition of the second story, was completed in 1963. The architect was Bill Davies and landscape designer Doug Baylis.

### *Criteria 1, 2: Association with Significant Events or Persons*

In 1961, tenants included a number of dentists, a psychologist, an optician and an employment agency.<sup>87</sup> None of these have attracted the notice of history (beyond the occasional real estate transaction, charitable donation, wedding or obituary notice), nor have any historical events of note taken place at this site. 703 Welch Road does not appear to be eligible for listing under criteria 1 or 2.

### *Criterion 3: Design*

The building is modern in design: concrete with decorative pierced concrete screens at the entries and stairways, and a mansard roof screen suspended above the one story sections and tying into the eaves of the second story additions. The building is very long and narrow, an effect that architect Davies attempted to redress in a later remodel project (1970) by painting the ornamental screens and other accents a dark, contrasting color. The outward facing walls are pierced by small, high, horizontal windows (*Figure 10-58*). Facing the interior court, these windows are supplemented by vertical glass panels in some areas (*Figure 10-59*). The fenestration is inconsistent in the interior facades, suggesting later alterations by tenants.



*Figure 10-58: 703 Welch Road, West facade*



*Figure 10-59: Welch Road, Courtyard*

The landscape treatment was the subject of prolonged discussion between Stanford and the Welch Road Properties company. The building developers needed more parking spaces and successfully resisted adding planting strips along the long sides of the building and along the property lines. Tiny islands of hardy yucca and juniper dot the sides of the building. The only major landscape area is in the setback from Welch Road, which was originally planted in 1958 in a mass of juniper shrubs until Stanford insisted that the shrubs be replaced with lawn and trees in “clumps of three” in 1960.<sup>88</sup>

The assessment questions suggested by the GSA report, Growth Efficiency and Modernism are useful in the case of this building as well:<sup>89</sup>

*Is it a formative design in the portfolio of a prominent architect whose work had an important influence on a community, region, state, or country?*

No. Architect Bill Davies and his partner E.A. Wadsworth have attracted little if any critical attention for their designs, either at 703 Welch Road or elsewhere. They cannot be described as prominent or influential. Landscape designer Doug Baylis has received more attention. A protégé of Thomas Church, he enjoyed a successful practice in partnership with his wife Maggie Baylis. Baylis is widely recognized as a leading figure in California modernist landscape design, of whom Church once remarked that “he would be known as the guy for whom Douglas Baylis had once worked.”<sup>90</sup> Baylis appears to have abandoned the commission at 703 Welch Road after reporting that “the owner seems inclined to dispute the recommendations.”<sup>91</sup>

*Is it a highly influential or outstanding work or is it a lesser work in the portfolio of a master architect?*

No. It is not the work of a master architect nor is it highly influential or outstanding.

*Is it a successful example of a Modern-era style such as Expressionism, Formalism, or Brutalism?*

No. The building is an awkward example of California modernism, and an unfortunate lost opportunity to improve its character was missed when the developer chose to maximize parking spaces rather than adopt a landscape plan by Doug Baylis. It is unclear however, if Baylis could have rescued the design from the unfortunate extremes of its long, tight form.

*Does it exemplify the Modernist design philosophy, making effective use of modern materials, components, public artwork, noteworthy landscaping or site design?*

No.

*Are interior and exterior significant spaces fully intact as designed, with original materials and features?*

No. The main entry area was redesigned in 1970 and the windows and doorways in the courtyard facing walls have been repeatedly changed.

The building at 703 Welch Road does not appear eligible for listing under criterion 3.

#### *Criterion 4: Information Potential*

The building at 703 Welch Road does not appear to have the potential to yield important information in history or prehistory. This criterion is typically applied to archaeological sites or examples of unusual construction methods for buildings or structures. The 703 Welch Road building is not eligible for listing under criterion 4.

#### *Integrity*

The building has undergone a series of alterations since its original design in 1958: the addition of the second story in 1963, redesign of the main entry in 1970, and the addition of a deck on the roof of the single story section in 1981. While the fenestration and ornamental details of the two long facades are substantially intact, the courtyard facades have been repeatedly altered. The building at 703 Welch Road cannot be said to display integrity of design.

As the 703 Welch Road building does not meet any of the four criteria for listing on the California Register, and has lost its integrity of design, it does not appear to be a significant historical resource.

## 1101 Welch Road, Medical Plaza

Three long, low, one-story wooden buildings were developed at 1101 Welch Road by a consortium of thirty-eight private physicians, opening as the Medical Plaza in 1958. By 1961 there were nearly fifty physicians occupying the buildings, along with a pharmacy. It remains largely medical offices to this day.

The buildings are low profile, surrounded by parking lots, screening fences and landscaping (*Figure 10-60*). There is a small plaza with a water feature in between two of the buildings (*Figure 10-61*). Rarely noticed, they are however the work of a well-known California architect, William Wurster, and landscape architect Lawrence Halprin.



*Figure 10-60: 1101 Welch Road*





*Figure 10-61: Fountain plaza at 1101 Welch Road*

*Criteria 1, 2: Association with Significant Events or Persons*

The medical offices and pharmacy at 1101 Welch Road have not been identified as the location of any notable historical events, other than a brief series of articles regarding laboratory safety in the late 1990s.<sup>92</sup> These were the offices of practicing family doctors: primarily pediatricians, obstetricians, and gynecologists.

There are many prominent citizens among the physicians who practiced in the Medical Plaza, however:

*A property is not eligible if its only justification for significance is that it was owned or used by a person who is a member of an identifiable profession, class, or social or ethnic group. It must be shown that the person gained importance within his or her profession or group.<sup>93</sup>*

None of the physicians associated with the buildings in the early 1960s have left a notable impact on the history of medicine. The buildings at 1101 Welch Road do not appear eligible for listing on the California Register under criteria 1 or 2.



### *Criterion 3: Design*

The three buildings at 1101 Welch Road are similar in scale and type to many suburban professional office buildings of the late 1950s and early 1960s: one story, modern in style, owned by the professionals who practiced within them. There are a number of medical and dental offices in Palo Alto of this age and type. Several located along Middlefield Road display similar style (*Figures 10-62, 10-63*). The stylistic features including wide, overhanging eaves, large glass panels, and enclosed patios of 1101 Welch Road are also quite widespread in the local area, particularly in the large housing subdivisions constructed by the Eichler Homes, Inc. firm.



*Figure 10-62: Medical office building on Middlefield Road, constructed circa 1959*



*Figure 10-63: Detail showing eaves, clerestory and windows on medical office building on Middlefield Road, constructed circa 1959.*

There are many medical and dental office buildings in the local area of this period. There is little to distinguish the buildings at 1101 Welch Road from these: they are all more residential than institutional in character, modern in style, and modest in materials and ornament. As the buildings are less than 50 years old, a scholarly perspective is important in reviewing their significance.

The architect, William Wurster, and landscape architect, Lawrence Halprin, are prominent figures in the development of California modernism. William Wurster (1895-1973) was a California native, born in Stockton. He had a long and varied career including a tour in the merchant marines, architectural practice in New York and California, and nearly twenty years as an educational administrator: first as Dean of the School of Architecture at MIT (1944-1949), then at the University of California at Berkeley as Dean of the School of Architecture (1950-1959) and later as the Dean of the newly formed College of Environmental Design at Berkeley (1959-1963).<sup>94</sup> Lawrence Halprin (1916-) worked for Thomas Church in San Francisco in 1944, after service in the Navy during World War II. He opened his own practice in 1949.<sup>95</sup> He has enjoyed a remarkably long and successful career, whose highlights include design of a number of major public plazas in San Francisco, parks in Portland and Seattle, and work for National Park Service at Yosemite, the Presidio in San Francisco, and the Franklin Delano Roosevelt Memorial in Washington, D.C.

Wurster had designed two projects at Stanford before this commission: Phase I of the Graduate Student Housing project (1957, with Thomas Church), and the Center for Advanced Study in the Behavioral Sciences (1954). Wurster had also designed a number of private homes in Palo Alto and the vicinity in the 1930s, 40s and 50s. In 1958, when Wurster was selected as architect for the Medical Plaza, he had recently completed a

vacation home for the physician leading the project (James Newell) at the Sugar Bowl ski area (Wurster had designed the ski lodge and a number of homes at Sugar Bowl).<sup>96</sup>

The assessment questions suggested by the Growth, Efficiency and Modernism report provide a scholarly framework for evaluating these buildings.<sup>97</sup>

*Is it a formative design in the portfolio of a prominent architect whose work had an important influence on a community, region, state, or country?*

No. It is a relatively late design by a prominent architect whose career had shifted to emphasize his educational and planning interests. Scholars recognize Wurster's important influence in California design in the 1930s and 40s, but suggest that his firm was "no longer at the forefront of architectural development" after his return from the east coast in 1950.<sup>98</sup>

Wurster's use of vernacular styles and materials was revolutionary and controversial in the 1930s. He was a leader in the development of a distinctly northern Californian style of modern architecture and is most noted for his residential projects of the 30s and 40s. In 1927, his simple, rustic design for the Gregory Farm House in Scott's Valley was recognized as redefining good taste for the upper middle classes in California (*Figure 10-64*), and influenced the emergence of the "ranch house" as a popular suburban architectural form (it was on the cover of *Sunset* magazine in July 1930).<sup>99</sup> By 1959, a low, slightly rustic, one-story modern office complex was no longer innovative.



*Figure 10-64: Gregory farmhouse, 1928*<sup>100</sup>

In the late 1950s Wurster, Bernardi and Emmons had a large practice in northern California. Their largest commercial client in this period was Safeway: they designed more than eighty Safeways, including the Palo Alto store (1958). By 1958 when the Medical Plaza was designed, they were highly respected but no longer cutting-edge.

Lawrence Halprin was at an earlier stage in his career in 1958. However, the narrow planting strips and tiny plaza at 1101 Welch Road cannot be considered formative in his career. Halprin struggled with the project. His first planting proposal had to be radically altered as he had proposed plants better suited to the foggy summers and mild winters of San Francisco than to the searing heat of the Palo Alto summer (and the occasional frost in the winter).<sup>101</sup> The site is definitely not suited to rhododendrons and ferns. A magazine clipping in the project file notes that "...despite the handsome screens and the detailing of the stucco wall panels... the well-planted charm of the complex gives way to the predominance of the automobile."<sup>102</sup>

*Is it a highly influential or outstanding work or is it a lesser work in the portfolio of a master architect?*

It is a lesser work in the portfolios of Wurster, Bernardi and Emmons and of Lawrence Halprin.

*Is it a successful example of a Modern-era style such as Expressionism, Formalism, or Brutalism?*

When it opened in 1958, some local physicians derided the project as a "little Petaluma," because of the similarity of its form to the vernacular architecture of poultry houses. The Dean of Stanford's School of Medicine complained that it was an "unfortunate blemish" on the area.<sup>103</sup> However, the project's clients were satisfied. Dr. James Newell wrote ten years after the project was completed that "there is nothing so fresh and attractive as the grounds and buildings today."<sup>104</sup> The university's business manager remarked diplomatically with regards to the disagreement: "Architecture is an uncertain science appealing to the individual emotions, and apparently all of us have different points of view."<sup>105</sup>

The design certainly cannot be called Expressionism, Formalism or Brutalism. These are styles associated with modernism in its larger international context. The "Bay Area Regional" style is distinctly and deliberately apart from these styles. The Medical Plaza at 1101 Welch Road is a typical but not outstanding example of Bay Area Regional modernism.

*Does it exemplify the Modernist design philosophy, making effective use of modern materials, components, public artwork, noteworthy landscaping or site design?*

The unusual redwood patio fences designed by Halprin are interesting however the overall site design and landscaping are not noteworthy. The use of stucco and redwood is effective but not distinctive. The placing of these rustic, residential style offices in a sea of parking lots at a major medical center was not as successful as the application of this romantic approach in the wooded suburbs of Palo Alto or Woodside.

*Are interior and exterior significant spaces fully intact as designed, with original materials and features?*

The exteriors of the buildings are well-preserved; there are no significant interior spaces. The overall composition however, has lost integrity due to the removal of a major element: at the time of its design and construction, the giant eucalyptus trees of Governor's Avenue crossed the property, softening the more than an acre of paving and giving a vertical dimension to the horizontal composition of the one-story buildings and wide parking lots. One of the buildings was built across the avenue's alignment, but Wurster and Halprin specified that the large trees should be retained where possible.<sup>106</sup> The trees have declined over time and all but one has been removed. Without the strong presence of these massive trees, the long low buildings have an altered sense of scale.

The Medical Plaza buildings at 1101 Welch Road are minor works by well regarded designers. Wurster, Bernardi and Emmons and Lawrence Halprin have created many more important designs that survive to commemorate their legacy to California style. The 1101 Welch Road buildings do not appear to be eligible for listing on the California Register of Historic Places under criterion 3.

*Criterion 4: Information Potential*

The Medical Plaza at 1101 Welch Road does not appear to have the potential to yield important information in history or prehistory. This criterion is typically applied to archaeological sites or examples of unusual construction methods for buildings or structures. The Medical Plaza is not eligible for listing under criterion 4.

*Integrity*

One major change to the property as noted above, is the absence of the Governor's Avenue alignment and trees (*Figures 10-65, 10-66*).



*Figure 10-65: Governor's Avenue crossing 1101 Welch Road, 1960  
(red arrow points to site)*



*Figure 10-66: 1101 Welch Road, Governor's Avenue (2006) trees and alignment absent  
(surviving fragments of alignment shown in red)*



Overall, the property has retained integrity of materials and workmanship on the exterior; the interiors of the individual doctor's offices have been updated over time. However as noted with regards to the loss of the giant tress, the overall design and setting has lost integrity. The relationship between the landscape and the rustic forms of the buildings was crucial to California modernism, the transformation of the landscape at 1001 Welch Road from rural hay fields and eucalyptus to parking lots and island planting beds diminished the quality of this design.

The Medical Plaza at 1101 Welch Road does not achieve the level of design distinction or of historical association to merit listing on the California Register of Historic Places.

### **Main Medical Center Complex**

The Main Medical Center Complex (1959, 1963) is a sprawling series of three-story buildings originally constructed to house the joint Palo Alto – Stanford Hospital and Stanford University Medical School (*Figure 10-67*). In 1967 Stanford University purchased the portion previously owned by the City of Palo Alto and the facility was renamed the Stanford University Hospital and Medical Center. The Stanford University Medical Hospital and Medical Center and Stanford University School of Medicine continue to use the Main Medical Center Complex, as well as a number of more recent buildings in its vicinity.



*Figure 10-67: Main Medical Center Complex, Pasteur Drive entrance*

### *Criterion 1: Association with Significant Events*

The Stanford University Medical Center is a research center as well as a regional hospital. Significant innovations in medical treatment that originated in the buildings might meet the test of significance, if the locations of these innovations within the building retain authentic historic character from the period of the discoveries.<sup>107</sup>

The Stanford medical faculty are engaged in continuous cycles of research and application of new knowledge to medical treatment. All such discoveries made in the Main Medical Center Complex have taken place within the past 50 years (since the first phase of the building opened in 1959) and in order to judge their significance, they must be documented by a “scholarly perspective.” In the case of medicine, the scholarly perspective can be provided by major prizes, such as the Nobel Prize for Medicine. Four Stanford medical researchers have won the Nobel Prize: Joshua Lederberg (1958), Arthur Kornberg (1959) and Andrew Fire (2006) in Medicine and Paul Berg (1980) in Chemistry. (Lederberg’s prize was awarded for work performed at the University of Wisconsin, he was at Stanford from 1958 to 1978; Kornberg’s prize was for discoveries made at Washington University in St. Louis.) All four of these distinguished scholars are still living and professionally active. The National Register of Historic Places cautions strongly against listing properties for association with the achievements of living persons:

*“Properties associated with living persons are usually not eligible for inclusion in the National Register. Sufficient time must have elapsed to assess both the person’s field of endeavor and his/her contribution to that field. Generally, the person’s active participation in the endeavor must be finished for this historic perspective to emerge.”<sup>108</sup>*

Several milestone events in the development of organ transplantation also occurred at the Stanford Hospital and Clinics: the first heart transplant in the United States was performed in 1968 by Dr. Norman Shumway and the first successful heart-lung transplant was made by a team led by Shumway and Dr. Bruce Reitz in 1981. Dr. Reitz is still an active member of the faculty at Stanford. Dr. Shumway died in 2006. The development of organ transplantation has prolonged life and eased suffering for many (more than 60,000 heart recipients) and the drive for organ donations has become an important social movement in the U.S.

In order for the Main Medical Center Complex to be eligible for listing due to association with the 1968 transplant operation, the essential physical features associated with the event should retain integrity.<sup>109</sup> In the case of the heart transplant operation, this would be the operating room where the surgery was performed. This location within the Main Medical Center Complex should continue to display the physical features – floor plan, surface finish materials and equipment -- that were in the room in 1968. In addition, its setting within the building should remain substantially similar in character to its condition in 1968. While the operating room where the transplant took place continues to serve surgical procedures, neither the operating room nor its surrounding facilities have retained “authenticity” to the 1968 period having been remodeled many times. They are now contemporary in character and equipment. So while the association with the 1968 heart transplant event is significant, its location within the Main Medical

Center Complex fails to retain sufficient integrity to merit listing on the California Register of Historic Places under criterion 1.

*Criterion 2: Association with Significant Persons*

The Stanford medical school faculty and hospital physicians have always been a respected and accomplished group; however the identification of the building with a profession or a group of distinguished citizens is not sufficient to meet this criterion. Specific named individuals must be identified, the building must be associated with the productive period of their lives, no other property should be more closely associated with their accomplishments, and the location should retain integrity to represent the period of their significant accomplishments. The persons, with rare exceptions, should be deceased.<sup>110</sup>

Dr. Shumway was an important pioneer in the development of organ transplantation in the 1960s and 1970s. The Department of Cardiothoracic Surgery that he led from 1974 to 1993 is closely associated with Dr. Shumway. While Dr. Shumway did work within the Main Medical Center Complex, the department he led, the Department of Cardiothoracic Surgery moved to a new location in the nearby Falk Cardiovascular Research Center in 1984. Dr. Shumway's office in the Main Medical Center Complex was reassigned and remodeled after his move to the Falk Center.

As with criterion 1, since the essential physical features and setting of the Department of Cardiothoracic Surgery at the Stanford Hospital associated with the work of Dr. Norman Shumway in the 1960s and 1970s are absent, the Main Medical Center Complex does not have sufficient integrity to meet criterion 2.

*Criterion 3: Design*

Framework for Evaluation. The Main Medical Center Complex is an example of a post World War II medical facility, designed by a major architect and a major landscape architect of the period. However, association with a famous designer is not by itself adequate to demonstrate significance. As the buildings are less than 50 years old, the California Register directs that a "scholarly perspective" be applied to assess the significance of the building. In the case of post World War II public buildings, this scholarly perspective is provided by the national report Growth, Efficiency and Modernism which summarized the findings of a panel of eminent scholars and architects regarding architecture of the post war period. This report asks the following questions as guidance for determining significance:

*Is it a formative design in the portfolio of a prominent architect whose work had an important influence on a community, region, state, or country?*

*Is it a highly influential or outstanding work or is it a lesser work in the portfolio of a master architect?*

*Is it a successful example of a Modern-era style such as Expressionism, Formalism, or Brutalism?*

*Does it exemplify the Modernist design philosophy, making effective use of modern materials, components, public artwork, noteworthy landscaping or site design?*

*Are interior and exterior significant spaces fully intact as designed, with original materials and features?*<sup>111</sup>

To address these questions, it is important to understand the relationship between the design intent and the quality of its execution, as well as the function of the buildings as medical facilities and the success of the design in meeting those needs. An outstanding, successful modernist building will be highly functional and true to its design intent.<sup>112</sup> In addition, its significant elements will be well preserved in its current condition.

The Designers. First, the building should be placed in the context of the careers of its designers: Edward Durrell Stone, architect, and Thomas Church, landscape architect. Edward Durrell Stone (1902 – 1978) was an internationally known architect, whose portfolio included more than 600 projects. He began his practice in 1933 and continued to work until his retirement in 1974 (he died in 1978 at the age of 76). His style evolved over the 40 years of his career: from clean, simple International Style buildings in the 1930s and 40s to a more ornamental Formalism in the 1950s and 60s.<sup>113</sup>

E.D. Stone was a celebrity architect in the 1950s and 60s, profiled in Time Magazine, the New Yorker and other popular publications.<sup>114</sup> His lush, romantic style was considering a refreshing change from the cold steel and glass modernism of many of his contemporaries. He was more popular however with the public than with his fellow architects and architectural critics:

*To the glass-and-metal men, the “machine-for-living” enthusiasts, and the faithful followers of the International Style, still influenced by Walter Gropius, he is merely a rather engaging contemporary romantic – a latter-day exponent of the Beaux-Arts tradition, which held sway at the beginning of the century.*<sup>115</sup>

Recent scholarship continues to reflect this view. None of Stone’s buildings are included in the recent *Icons of Architecture* book, profiling the highlights of 20<sup>th</sup> century architecture, including some decidedly romantic buildings by Stone’s contemporaries.<sup>116</sup> Another recent review, *Makers of Modern Architecture*, mentions Stone only in passing (in the chapter on Philip Johnson):

*When corporate clients in the late 1950s briefly responded to the decorative Neoclassical Modernism of such fleetingly fashionable architects as Edward Durrell Stone and Minoru Yamaskai, Johnson, who had long harbored Romantic tendencies, pirouetted into what was called his “Ballet School Period”...*<sup>117</sup>

A number of Stone’s buildings have been dismissed by local historic preservation commissions, including his controversial art museum building at 2 Columbus Circle in New York. A proposal by the Museum of Art and Design to alter the façade sparked a heated debate about the merits of the building. Critics, including the curator of architecture at the Museum of Modern Art, described the long vacant building as a failed

design, a nearly windowless wall of white marble: a “mausoleum.”<sup>118</sup> Equally distinguished supporters rallied to defend the building. Yale’s Vincent Scully wrote in favor of preservation: “something rather wonderful has occurred, by which the building, never anyone’s favorite in the past, is looking better every day.”<sup>119</sup>

The California Register requires that “sufficient time must have passed to obtain a scholarly perspective” on the significance of a building.<sup>120</sup> Unfortunately, there is as yet no scholarly consensus on the contributions of Edward Durrell Stone to the history of architecture. The National Register cautions that the mere fact of being designed a well-known architect -- “the work of a master”-- is not sufficient to merit listing.<sup>121</sup> A careful examination of the building’s design quality is required to determine its relative importance compared to other building of its type, and by the same designer.

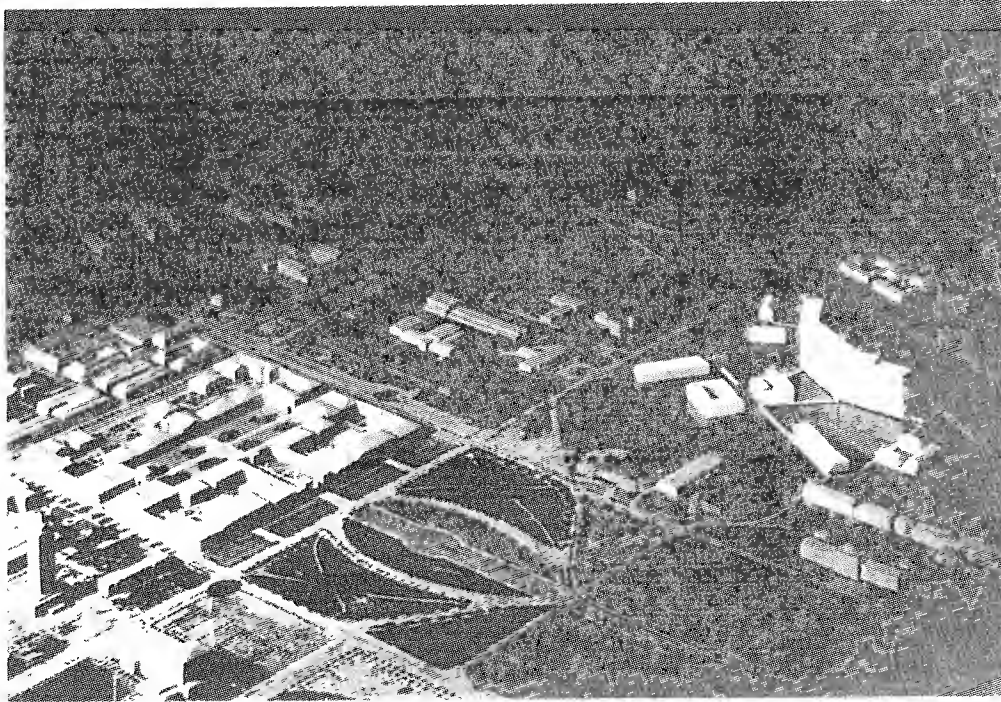
In 1956, when he received the commission for the Palo Alto – Stanford Hospital and Stanford Medical Center (as it was then known), E.D. Stone was an established, mid-career international architect. He made the transition from International Style to Formalism in the late 1940s. By the mid 1950s he was working in a lush, romantic Formalist style, typified by the United States Embassy in New Delhi, India (1954), the Stone Town House in Manhattan (1956), and the Brussels Pavilion (1957).

He had also recently completed a project with Thomas Church, the Stuart Pharmaceutical Company in Pasadena (1955). Stone and Church had first worked together at the El Panama Hotel in Panama City in 1946.<sup>122</sup>

Thomas Church (1902 – 1978) is best known for his residential projects in northern California. Church was a prolific writer, urban planner and landscape designer whose style progressed over time from “relaxed formality of style found in his early works from the 1930s, through the high modernism of the 1940s and early 1950s, and ultimately to the classical idiom he used in many later projects”.<sup>123</sup> He designed a number of projects at Stanford before collaborating with Stone on the Palo Alto-Stanford Hospital and Stanford Medical Center, including the Stanford Linear Accelerator Center campus (1948). Church continued to work at Stanford until 1970, designing a number of landscapes and serving on the campus Architectural Advisory Committee.

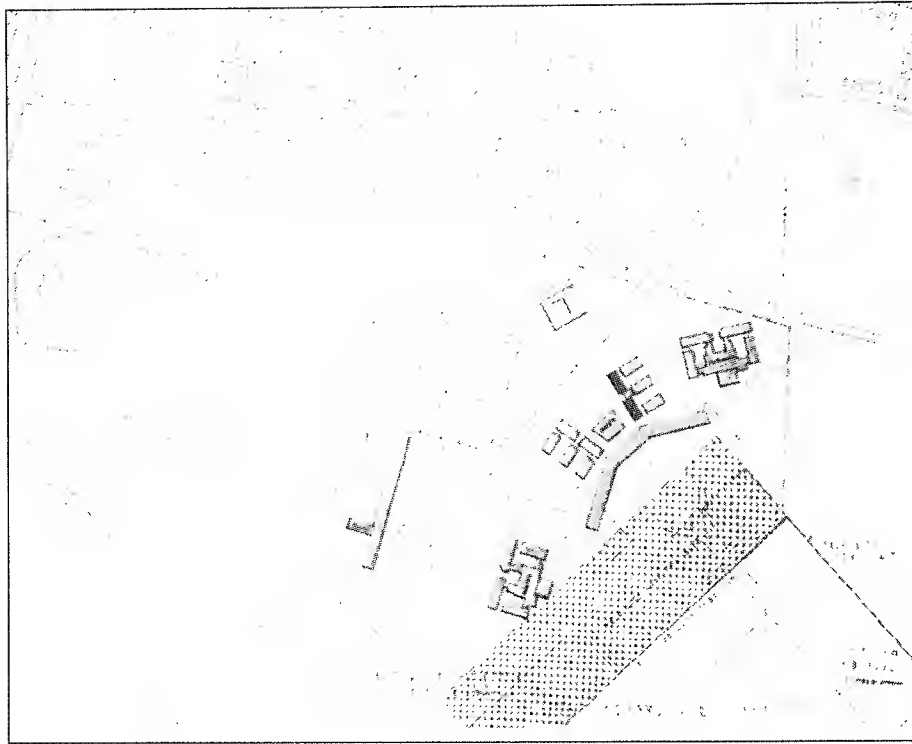
The Design Challenge. The Palo Alto-Stanford Hospital and Stanford Medical Center was a large and complicated commission for the two firms, requiring the construction of two separate hospitals and a medical school. The project had two major clients (Stanford University and the City of Palo Alto), each of which had a number of interest groups: politicians, planners, local physicians, university trustees, medical school faculty, business leaders, donors, and the local public (who had passed a \$4 million bond measure to support construction). Each client had multiple committees and commissions that reviewed the project (the Palo Alto City Council Hospital Committee, the Stanford University Medical Facilities Planning Committee, the Stanford University Planning Committee for Basic Medical Sciences, the Joint Palo Alto – Stanford Steering Committee and various city commissions). In addition, the university had a team of special consultants – directors of major university medical centers across the U.S. The project was ultimately approved by the City of Palo Alto and the Board of Trustees of Stanford University. From the beginning, the project required that the Palo Alto Hospital area be annexed into the city, while the Stanford medical school and hospital remain in unincorporated Santa Clara County.

Early studies show that the site and massing for the project shifted several times before the building complex took its final shape and the challenge of linking the two clients across a city limit line could be resolved. The initial proposal was for a complex of buildings surrounding a high-rise tower hospital for Stanford's medical center, with an (undesigned) adjacent Palo Alto hospital (*Figures 10-68, 10-69*).



*Figure 10-68: Model showing preliminary proposal (1955): Nine buildings on the right.*<sup>124</sup>





*Figure 10-69: Study for proposed project (1955): Note that the dotted area is the site for a separate Palo Alto Hospital<sup>125</sup>*

Hospital consultants Isadore and Zachary Rosenfield – Rex Whitaker Allen produced a study for a horizontal scheme in 1955, linking the Palo Alto and Stanford sections at a shared lobby space (with the city limit line running through the lobby) (Figure 10-70).



*Figure 10-70: Isadore and Zachary Rosenfield – Rex Whitaker Allen Study (1955)<sup>126</sup>*

**The Design Approach.** E.D. Stone designed more than two dozen medical facilities, including more than a dozen hospitals, over the course of his career. Some, like the Central Hospital in Lima, Peru (1950), were classic examples of high-rise post World War II hospitals as discussed above (*Figure 10-71*).

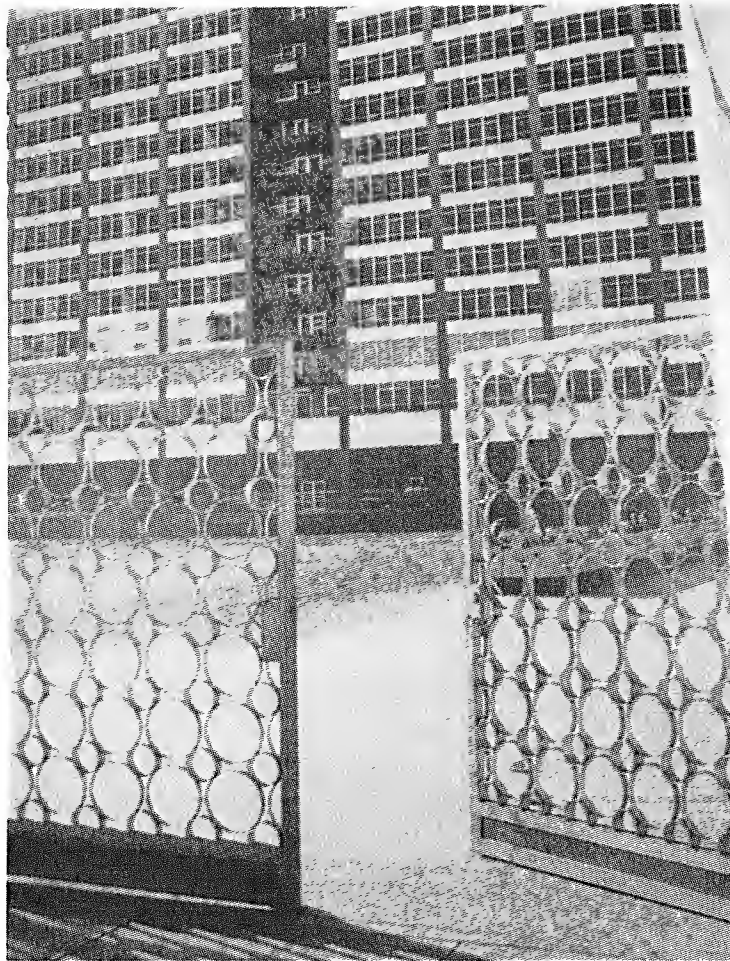


Figure 10-71: Detail General Hospital, Lima<sup>127</sup>

In the case of the Palo Alto-Stanford commission, he appeared on the scene as the “horizontal scheme” was gaining favor. A 1959 letter from John Hill, manager of Stone’s Palo Alto office, to the editor of Architectural Forum (Miss Mary Jane Lightbown) summarized the decision-making process (from Stone’s point of view):

*“The planning office gave him (E.D. Stone) the Mumford critique, which we all read, disagreeing with only one part. Mumford felt that all of the universities future needs could be taken care of with a system of two storey buildings. In practice, this is too extravagant, burning up space like mad, and for a medical center, unworkable – too horizontal. The stricture on ‘storey’ is unrealistic anyway when you are thinking of scale, as he was. The corners of the quad are only two storeys high, but that is 46 feet in this case, plus a podium of 8 feet, plus a great tile-peaked roof, the ridge of the law school is almost 90 feet high, 2 stories, 3 stories? Mr. Stone became infatuated with the quadrangle, the Mumford critique was useful, surveys had been made by experts showing the plausibility of a ‘horizontal’ hospital, the Dean at the time Winsor Cutting kept urging the architect to push the medical center closer and closer to the quad, that after all*

*was his purpose in moving from San Francisco, to have the Medical School as part of the university campus. The balance of the faculty objected to the close proximity of a teaching hospital, a city hospital and an outpatient clinic – it would bring in the philistines, and as we all know hospitals are tall slabs of white or red brick and that would completely ruin the horizon the scale, the atmosphere. It was in this situation that the medical center was designed.”<sup>128</sup>*

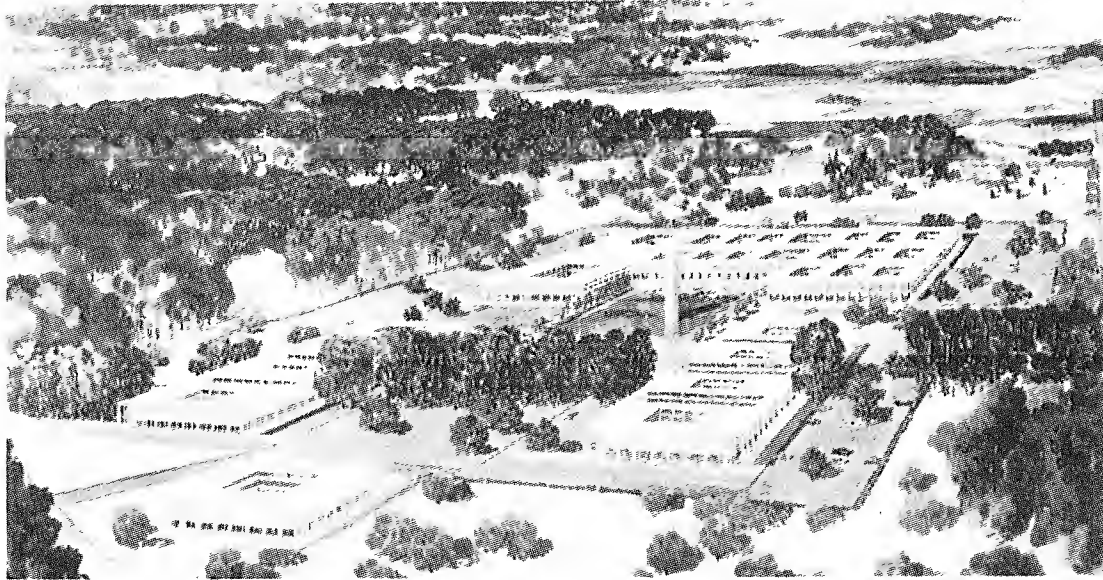
The decision for a horizontal scheme (3 stories, 38 feet tall) seems to have come from Stanford, which was paying for nearly 65% of the \$22 million project. Stone’s sketches for a later expansion reverted to the vertical – presenting four and five story buildings. Stone’s design for the Palo Alto Civic Center, completed in 1969, is also a classic high-rise modern design (*Figure 10-72*).



*Figure 10-72: Palo Alto Civic Center (1969), Photo courtesy Special Collections of the University of Arkansas Libraries*

Ultimately, Stone’s design for the project followed the 1955 Isadore and Zachary Rosenfield – Rex Whitaker Allen Study approach of separate Palo Alto and Stanford hospitals, linked by a “core” of shared facilities. Stone’s design inspirations for the project were said to have revolved around three themes: Stanford’s sandstone Main Quad (the textured concrete façade was apparently a reference to the rusticated sandstone blocks of the Quad), the notion of the hospital as “palace,” and the healing qualities of a “garden hospital.” These themes were reflected in the massive building complex he designed, arranged around a series of courtyards (*Figure 10-73*). It resembled the

European palace hospitals of the eighteenth century more than the modern high rise towers of the second half of the 20th century (*Figure 10-74*).



*Figure 10-73: An early rendering for the project showing Stone's grand master plan*



*Figure 10-74: Maison Nationale de Charenton, Paris, 1838-1885<sup>129</sup>*

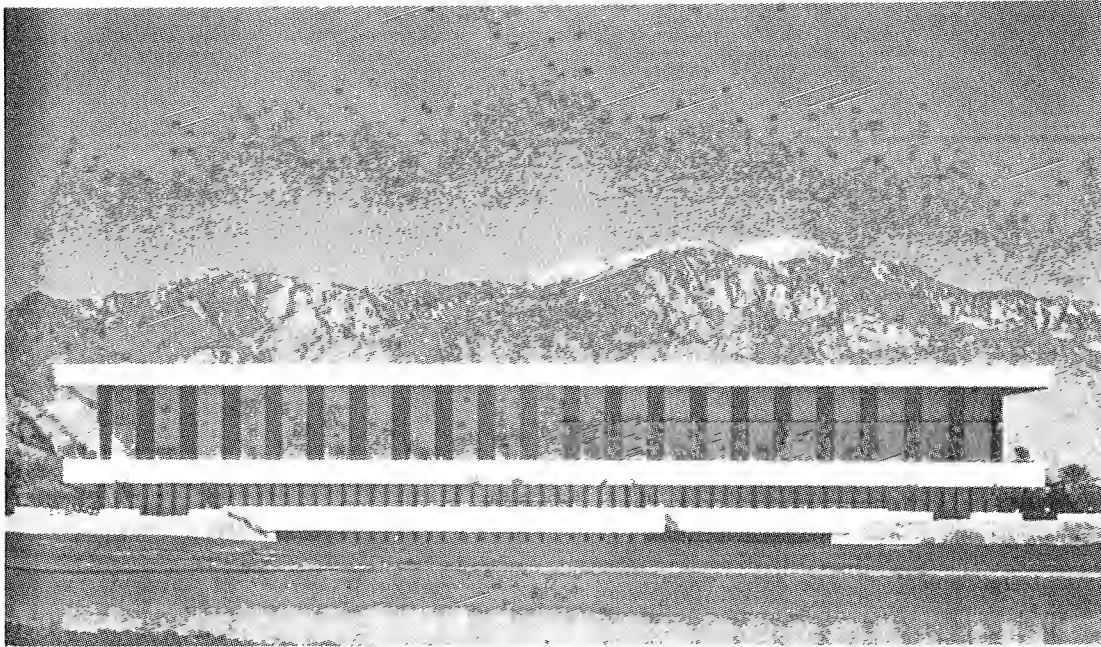
Stone's publicity for the project evoked images of the Taj Mahal, Versailles, Mayan palaces and even a "maple sugar palace" rendered in modern materials and

luxurious interior finishes (the project interior included travertine walls, teak screens and furniture by Herman Miller). Architectural Forum announced it as “Medicine’s New Taj Mahal: In Stanford’s new Medical Center a notable hospital plan becomes a veritable palace for healing” (1959). John Hill in his letter to Architectural Forum describes it as a “little Versailles for the sick” (1959). The interior public spaces designed by Maurice Sands for the Main Medical Center Complex had touches of elegance: travertine walls, teak screens, furniture by Knoll and Herman Miller. These are long gone, save for a short section of travertine wall. The character of the interior today bears no resemblance to its appearance as designed.

The Hospital as Palace theme (like the Hospital as Hotel theme of the pre World War II period) is out of sync with the evolution of medical facilities design during the period, which emphasized efficiency and function in a Modernist style.<sup>130</sup> While some critics appreciate the “sumptuous” character of Stone’s highly ornamental formalism, the palace theme was not a successful model for a hospital in its context at a university, in a small city. The emphasis on luxury in a building whose function was healing the sick was not universally popular: when the hospital opened in 1959 some of the staff physicians referred to it as the “Stanford Hilton.”<sup>131</sup> (Stone designed many hotels for Hilton in his long career.) In a similar vein, Stone’s specifications for the ornamental screen at the Palo Alto Main Library called for the screen to be painted in gold leaf – as were accents at his New York Town House, the New Delhi Embassy, the Stuart Pharmaceutical Building and the Brussels Pavilion. Palo Alto councilwoman Mildred Corcoran objected to the unseemly extravagance and the design was modified to call for white paint.<sup>132</sup> The screen wall is currently painted dark brown. The gold leaf accents he called for in the courtyards in the Main Medical Center Complex are absent as well.

In addition to the luxurious interior finishes, another key feature of the “Hospital as Palace” theme was the setting. In its original setting, the Main Medical Center Complex was a monumental structure set in an open grassy plain, relieved by huge heritage oaks and eucalyptus trees. The setting -- like that of the Kennedy Center in Washington on the Potomac River or the Eisenhower Medical Center in Palm Springs with the splendid mountain backdrop -- framed these imposing buildings in grand landscapes (*Figures 10-75, 10-76*). The Palm Springs Hospital, Peninsula Hospital and Scripps Clinic offered patients access to glorious views of the surrounding natural landscape. The Main Medical Center Complex has lost the grandeur of its original setting and never offered its occupants an outward view unobstructed by the ornamental screens of its façade, or the towering façade of a nearby wall (*Figure 10-77*). It is less successful as an example of palatial building forms than many of Stone’s other projects.





*Figure 10-75: Eisenhower Medical Center, Palm Springs<sup>133</sup>*

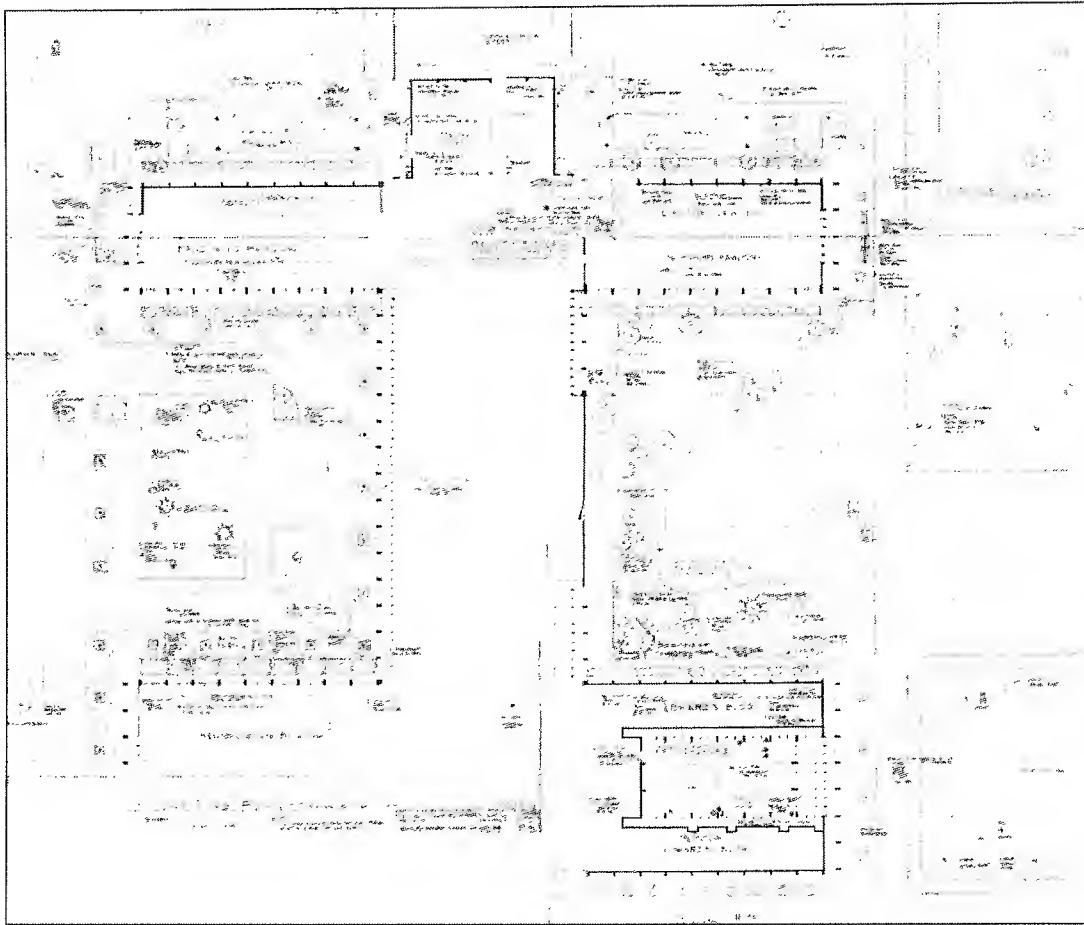


*Figure 10-76: View of mountains and "oasis garden" from patient room, Eisenhower Medical Center*



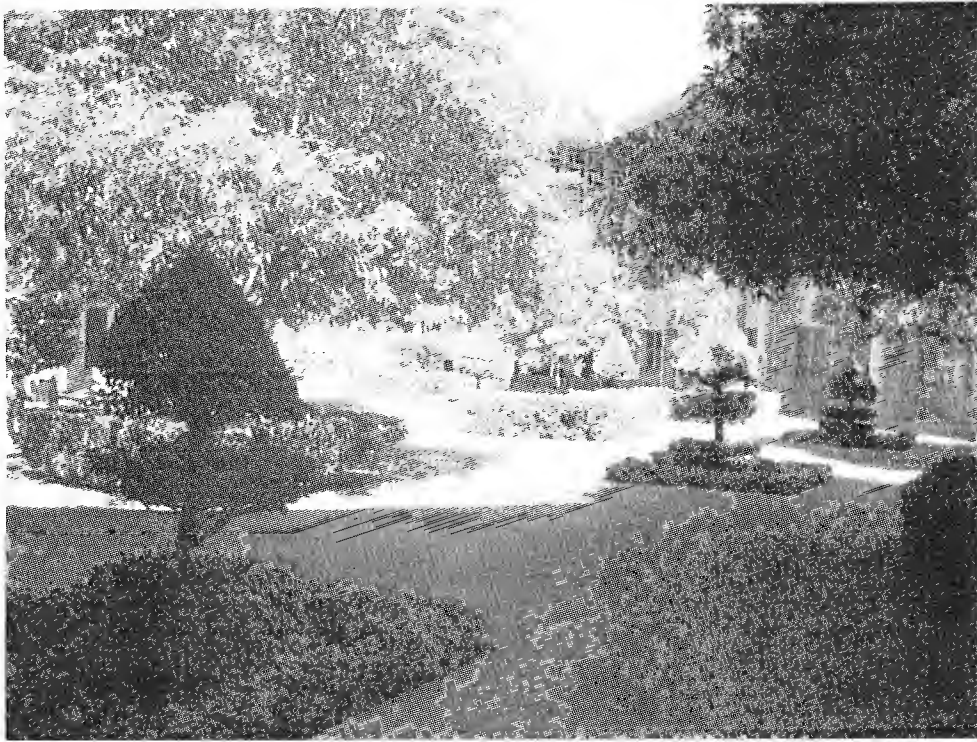
*Figure 10-77: View from second floor, Main Medical Center Complex Grant Building*

Stone also intended to design the Main Medical Center Complex as a “Garden Hospital.” Bringing forward a theme in healing that has persisted for centuries, the notion was to provide access to the gardens for patients as well as for visitors and staff to “get outside and enjoy the sunshine.”<sup>134</sup> Stone realized a number of successful examples of the Garden Hospital, including the Community Hospital of the Peninsula in Monterey (1962), the Scripps Clinic in La Jolla (1964), and his “oasis in the desert” Eisenhower Medical Center in Palm Springs (1971). With landscape architect Thomas Church at his side, the author of “Gardens are for People,” Stone’s design called for an elaborate arrangement of courtyards and a grand entry to the complex (*Figure 10-78*).

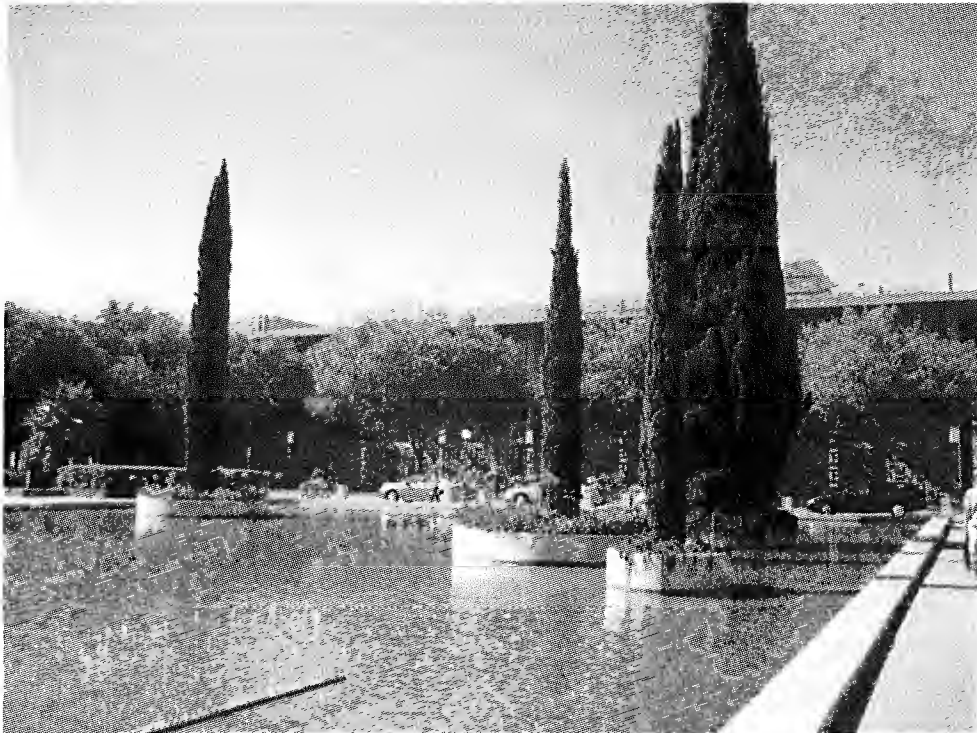


*Figure 10-78: Planting Plan, Thomas Church and Associates (1958)*

The courtyards included many of Thomas Church's signature elements: curved lawns and paved areas, rectangular parterres, and two water features. The large garden on the eastern side was divided into two courtyards when the Grant Building was added in 1963 (*Figures 10-92, 10-80*).

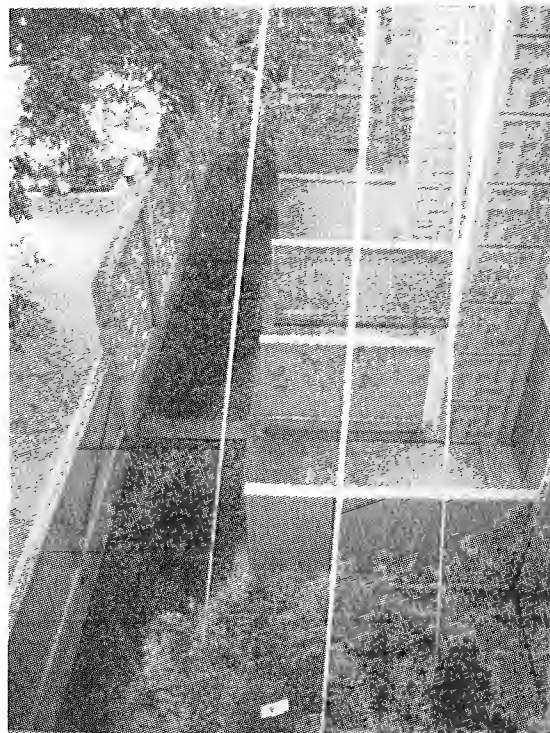


*Figure 10-79: Courtyard with Church parterres*



*Figure 10-80: Fountain at entry on Pasteur Drive*

In spite of these features, the design failed to meet its intent: patients did not (and to this day do not) use these garden spaces. Basic design errors – such as the width of doorways not allowing for passage of hospital beds from the Palo Alto pavilion into the patios overlooking the entry, and the placement of the Stanford nursing wards on the second and third floors far from the first floor entry into the adjacent courtyard – prevented most patients from receiving the potential therapeutic benefit of these spaces (*Figure 10-81*). The narrow courtyards surrounded by three story buildings function mainly as light wells (although most of the adjacent windows are covered with shades or blocked by air conditioning units) and are only lightly used to this day (occupants complain that they are cold, dark and claustrophobic – the street side arcade is the most heavily used outdoor space). The sunny picture of the patients taking fresh air in the garden was never realized in this design.



*Figure 10-81: Unused patios at original Palo Alto Hospital Nursing Pavilion*

By contrast, the interior fountain court of the Community Hospital of the Peninsula surrounded by the information desk, gift shop, and café is crowded with patients and visitors, because it functions “like a hotel lobby, furnishing a place to meet, receive information, find something to eat, relax or enjoy quiet entertainment.”<sup>135</sup> In contrast to the Main Medical Center Complex with its narrow courtyards, the patient rooms in Monterey look out into the forest, and the interior gardens are wide and open to the sky (*Figure 10-82*). The Main Medical Center Complex is not a fine example of a garden hospital, and certainly not the best attempt by E.D. Stone to achieve this end. Thomas



Church is best remembered for the more intimate residential gardens that redefined suburban style in California in the 1950s.<sup>136</sup>



*Figure 10-82: Courtyard at Community Hospital of the Peninsula, Monterey*

Finally, Stone emphasized his design intent for the massive concrete screen wall to echo the rustic sandstone blocks of the Main Quad. Stone photographed the Main Quad during his early visits to the campus (*Figure 10-83*) and clearly found the texture and scale of the walls inspiring (*Figure 10-84*). His original plan for the concrete screen wall at the hospital/medical school project was to use integrally colored concrete with a stone-like surface texture. Three samples were cast (*Figure 10-85*). Worried about the project cost, Stone eventually settled on covering the concrete surface with latex paint (*Figure 10-86*):

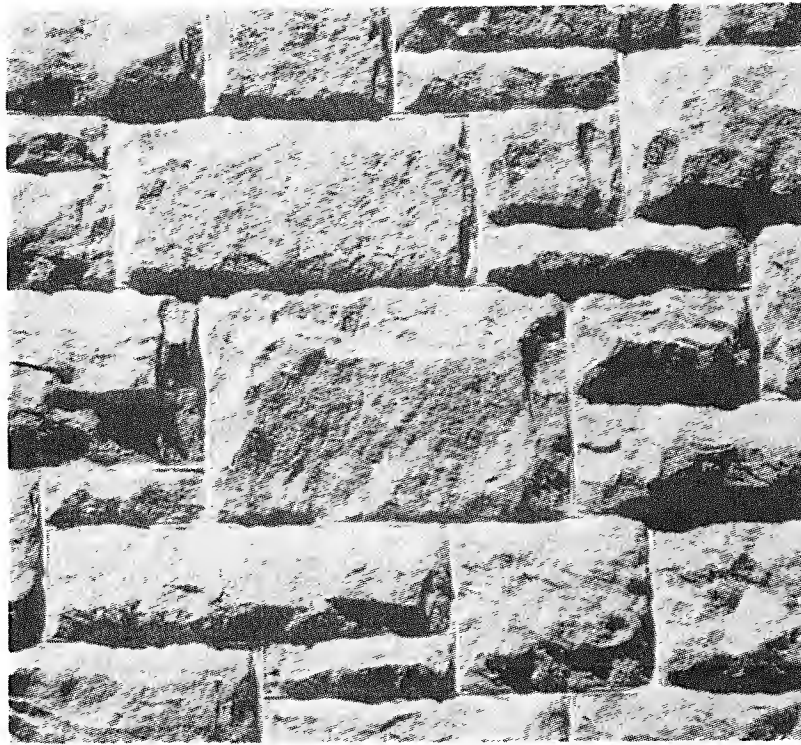
*“In general for this building, in California, and still today, poured-in-place concrete is absolutely the most economical method of construction. It is a brutal process and the results usually are too, unless millions are spent on tricky veneers or molds. Mr. Stone wanted a concrete surface that would have some of the qualities of light and shade, much the way the rusticated sandstone of the old quad responded to the strong backlighting, or is it underlighting, reflected from other surfaces in the bright sun. So it was decided to pattern the concrete for surface interest, this was the first time he had done this at all, and I believe only once since in the Carmel Hospital we are now designing in Palo Alto. A test column was poured in late December 1956. Integral color was used, then it was sand-blasted. It looked lovely, but in practice there would be complications in controlling the pours; colors for spandrels and columns only, not for slabs, also*



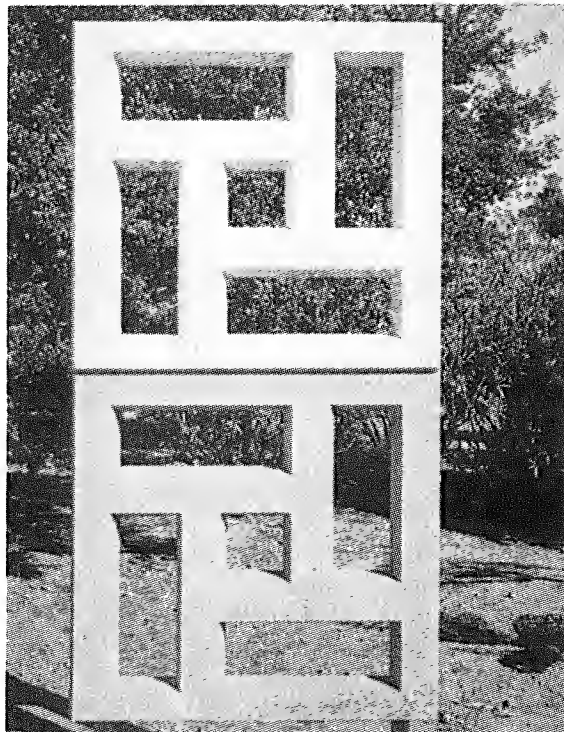
*sandblasting on such a scale would take us far off the path towards a cheap building, and it had to be cheap. Washes and stains were tried, finally a stucco paint with latex was selected. It has been sprayed on the building and looks wonderful despite many misgivings before hand.”<sup>137</sup>*



*Figure 10-83: Photograph of Stanford's Main Quad, by E.D. Stone<sup>138</sup>*



*Figure 10-84: Detail of sandstone at Main Quad*



*Figure 10 -85: Test pours for concrete surfaces with exposed aggregate<sup>139</sup>*

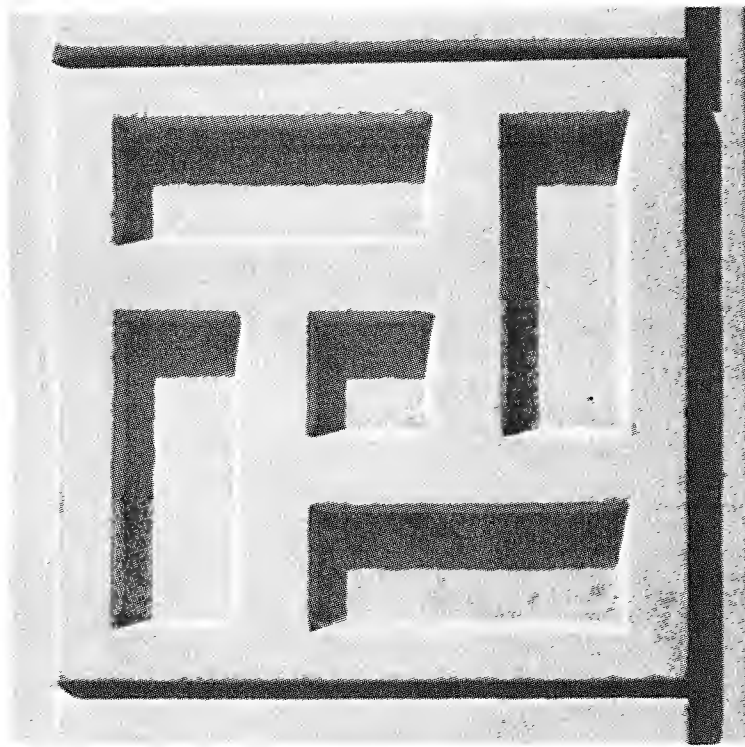


Figure 10-86: Detail of painted concrete at eye level (2007)

The patterned concrete screens are a signature of Stone's work during this period. Stone remarked that

*I have come to the belief that the device of the grille is warranted in most parts of the U.S. I think it serves not only to satisfy a wistful yearning on the part of everyone for pattern, warmth and interest, but also serves the desperately utilitarian purpose of keeping the sun off glass and giving privacy.<sup>140</sup>*

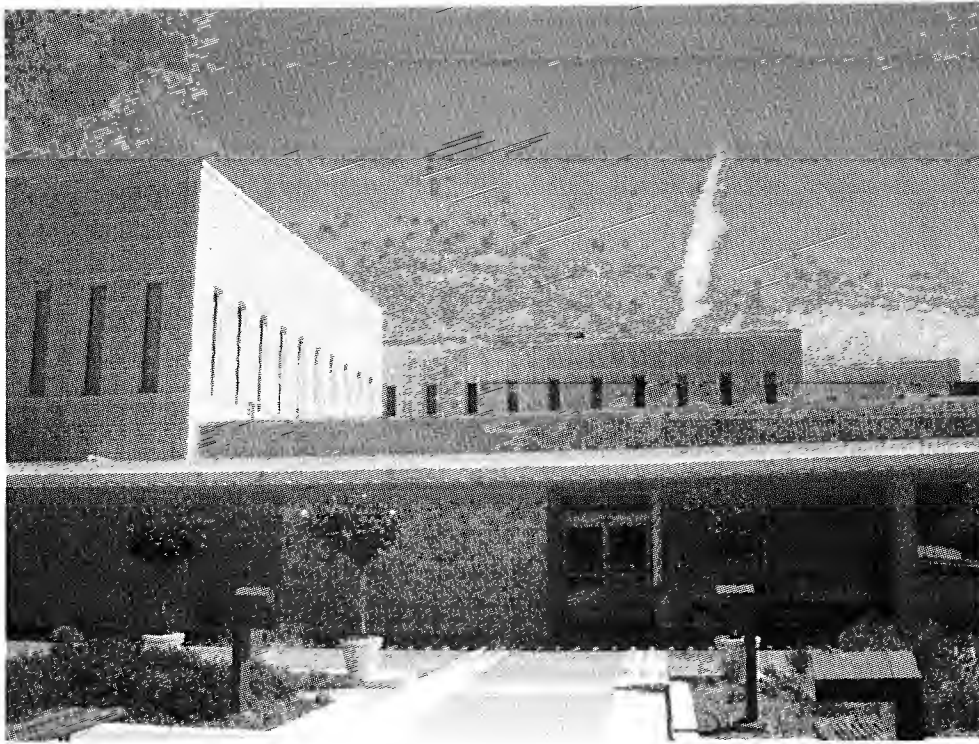
However, he admitted that on occasion the device didn't succeed. The screen he designed for a dormitory he designed for the University of South Carolina was acknowledged, even by E.D. Stone, to display an "overpowering monotony."<sup>141</sup> The use of the screen, then, is not in itself enough to make the Main Medical Center Complex significant as meeting the test of criterion 3: "*Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.*" The design must be successful in its own right and by comparison to other examples of the style.<sup>142</sup>

Stone's decision to substitute a latex paint finish for his preferred exposed marble aggregate concrete for cost reasons resulted in a serious compromise to his intent. The painted surfaces require a permanent staff of painters to maintain, and have not aged well over the forty-eight years since construction. They are no longer "wonderful." From a distance, the pattern of light and shadow is of interest, but there are few views remaining unobstructed by trees and later buildings (Figure 10-87). The patterning is relentless and visually noisy in the interior courtyards, in contrast to the quiet, lighter relief of the

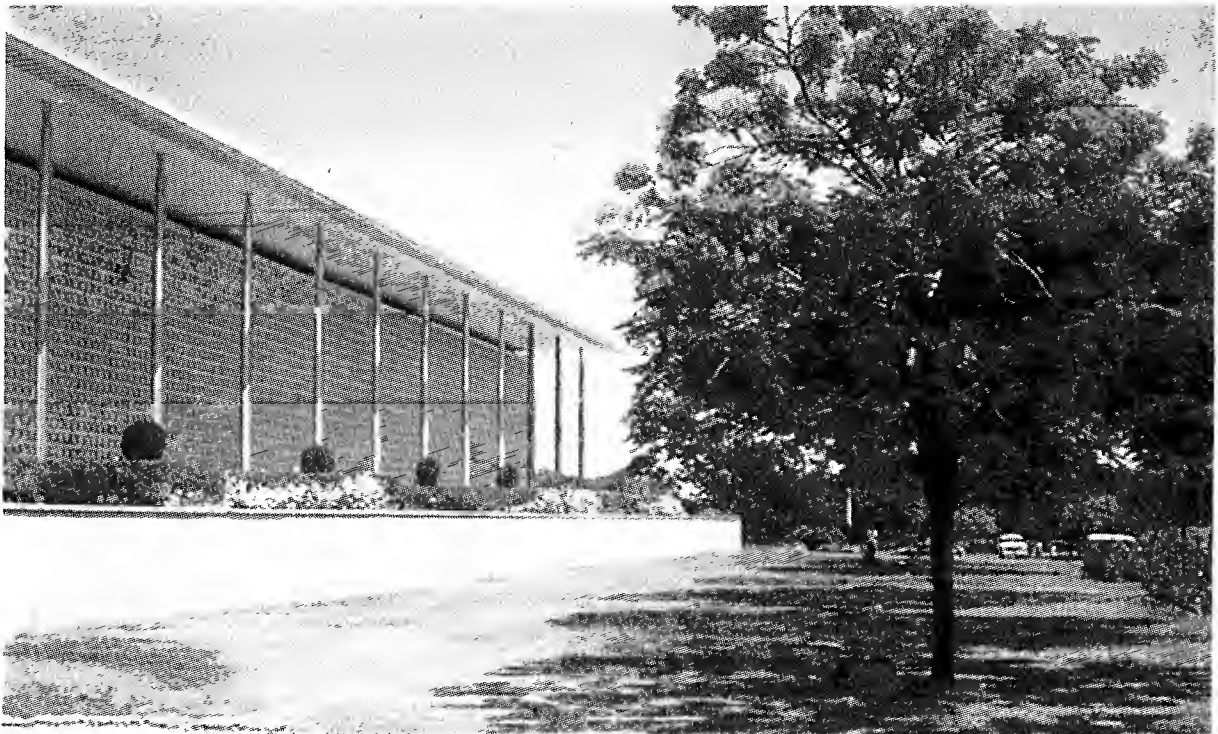
Community Hospital of the Peninsula with its pattern embossed in white concrete (*Figure 10-88*). Stone chose white for his tile grille at the United States Embassy in New Delhi (*Figure 10-89*), for the Palo Alto Civic Center, the Kennedy Center, Scripps Clinic in La Jolla, and the grill of the front of his New York town house. Stone's favorite combination was white (preferably marble or marble aggregate mixed into the concrete to give shine and sparkle) accented with gold, as he described his work during this period: "I had gone through the 'hair shirt period' of solid lumber, rough brickwork and stone. Maria's fine Italian hand began to show in my attire and my work: both began to move towards elegance. More marble floors, gold accents, fountains, lagoons and courtyards crept into my designs."<sup>143</sup> There are a number of surviving examples of this period in Stone's career that display these features. The Main Medical Center Complex's dull sand colored walls and screens do not meet the test of "embodying" Stone's use of this device, or of "possessing high artistic values" as required for listing on the California Register of Historic Places.



*Figure 10-87: Main Medical Center Complex, Pasteur Drive Entrance*



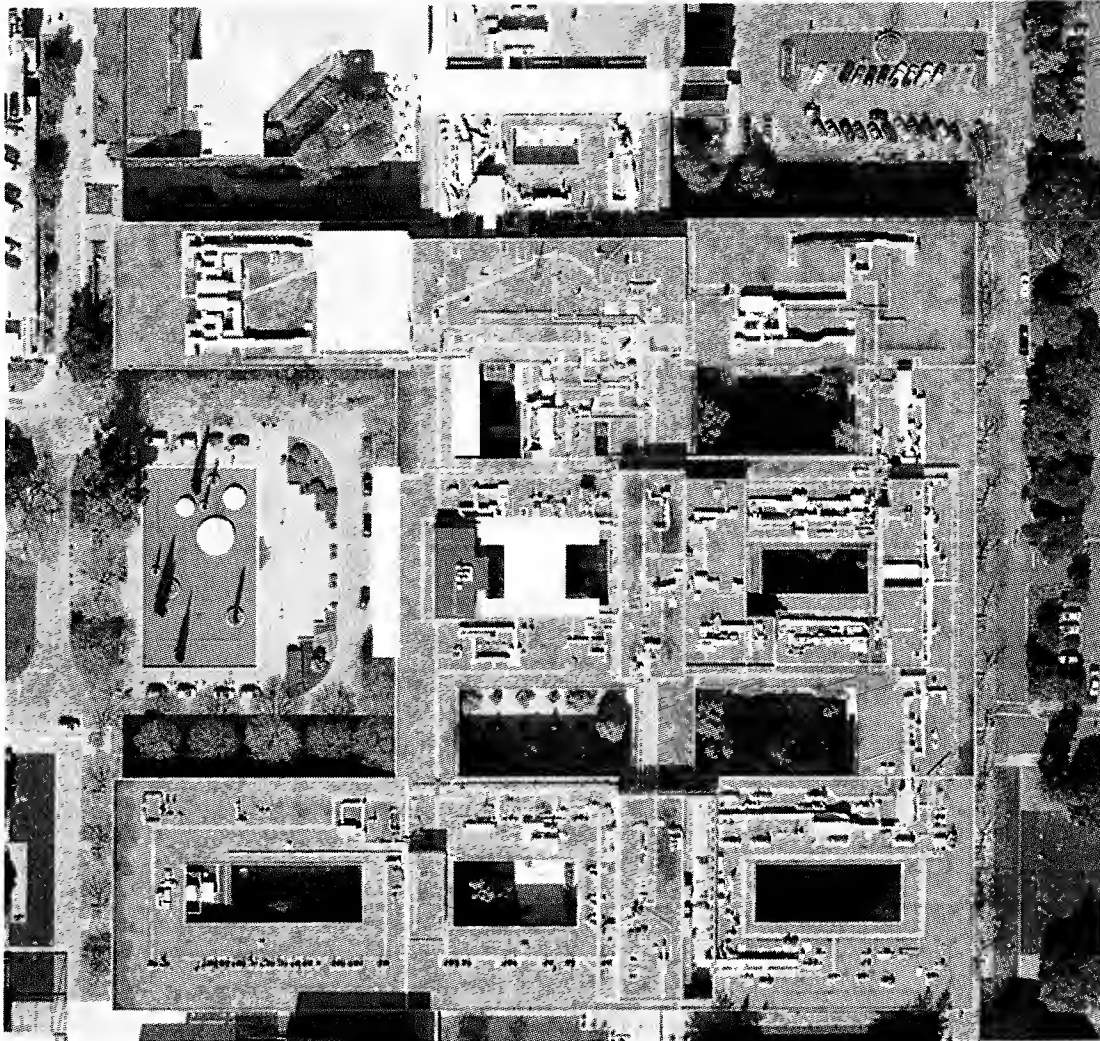
*Figure 10-88: Monterey Community Hospital*



*Figure 10-89: US Embassy, New Delhi*



Integrity of design. To be historically significant, a property must retain integrity of design, displaying the character-defining features of its style and period. An analysis of the Main Medical Center Complex shows substantial loss of integrity of plan since the completion of the buildings designed by E.D. Stone in 1963 with the addition of a series of attached buildings to the north, and the infill of courtyards (*Figure 10 -90*).



*Figure 10-90: Infill and Additions*

The setting has been radically transformed – the original design was a monolithic form surrounded by open parking lots and agricultural fields accented by heritage oaks and eucalyptus trees. The current setting is crowded, urban and eclectic in character (*Figure 10 -91*).





*Figure 10-91: Current Setting*

The interior spaces of the Main Medical Center Complex have also lost integrity: the original interior design by Maurice Sands is completely replaced by contemporary furnishings and finishes (*Figures 10-92, 10-93*).



*Figure 10-92: Solarium, 1959*



*Figure 10 -93: Solarium, 2007*

Many of the courtyards and gardens have also lost integrity over the years. As noted above for the Governor's Avenue trees, plants can be replaced as they age without necessarily destroying the integrity of a landscape design.<sup>144</sup> Church's style relied on form to produce beauty, not on flowering plants and he preferred hardy evergreen vegetation.<sup>145</sup> His original planting plan for the Main Medical Center Complex made heavy use of evergreen trees and shrubs. While many of these remain in place, they have been obscured by more recent ornamental plantings of roses and annuals (Figures 10-94), altering the feeling of the gardens. The infill of courtyards has further diminished the integrity of the design (Figures 10-95, 10-96).



*Figure 10-94: Replanting of ornamental flower beds in courtyard*



*Figures 10-95, 10-96 Courtyard Infill*

Due to changes in setting, interior materials and workmanship, overall plan and feeling, the Main Medical Center Complex does not display integrity of design.

Summary. The Main Medical Center Complex is an interesting building, but not a great achievement in architecture. To return to the questions posed by the scholars of architectural modernism presented above:

*Is it a formative design in the portfolio of a prominent architect whose work had an important influence on a community, region, state, or country?*

No. Edward Durrell Stone had already completed several “formative” major buildings in this romantic formalist style prior to completing the project, including the Brussels Pavilion, the U.S. Embassy in New Delhi, and the El Panama Hotel. There is little new in the landscape design from Thomas Church, who had been working with fountains and parterres since the 1930s.<sup>146</sup>

*Is it a highly influential or outstanding work or is it a lesser work in the portfolio of a master architect?*

It is a lesser work in the long and impressive careers of Stone and Church.

*Is it a successful example of a Modern-era style such as Expressionism, Formalism, or Brutalism?*

The design – architecture and landscape -- fail to successfully realize the intention of creating a Garden Hospital, and the attempt to recall a Palace Hospital is out of keeping with the Modern period – both in architectural history and in the history of medical facilities design – and was out of place in this suburban setting. Its serious

functional design flaws outweigh the limited appeal of its Formalist ornamental concrete façade.

*Does it exemplify the Modernist design philosophy, making effective use of modern materials, components, public artwork, noteworthy landscaping or site design?*

No. The visual appeal of some individual elements of the structure and landscaping is minor weighed against the more serious flaws in design.

*Are interior and exterior significant spaces fully intact as designed, with original materials and features?*

No. A detailed survey of the design integrity of the Main Medical Center Complex was conducted. Elements of the exterior façade and the landscaping of the entry and some of the interior courtyards are largely intact. Only small fragments of the interior finishes (the original escalators, for example) remain, and the setting has almost entirely lost its scale due to infill and new development in the Medical Center.

Examined in depth and in comparison to similar properties, the Main Medical Center Complex does not meet the level of quality in its design to merit listing on the California Register of Historic Places under criterion 3. The flawed design may have resulted in part from a chaotic planning process. The Palo Alto Times remarked that after receiving the commission

*There must have been times in the next two years when Stone, one of the country's best known architects, wished he had never heard of Stanford or Palo Alto. As soon as design was underway, a series of complicated feuds developed between Stanford and the city, Stanford and local doctors, "contract doctors" who supplied specialized service to the hospital and the city, and between individual Stanford doctors and individual Palo Alto doctors in the same specialties. All this ill feeling periodically erupted into the open, both at city council meetings and at staff meetings of Stanford men. Stone was caught in the middle because the hospital's design depended in many ways upon the way in which the local and Stanford doctors were to share the joint hospital. These problems have all been resolved now but there is a residue of ill feeling that observers agree can only be healed by the passage of time.<sup>147</sup>*

Complaints about design flaws in the building, and new disputes among its users surfaced within a year of its opening.<sup>148</sup>

The Main Medical Center Complex is a large structure designed by a well-known architect and landscape architect. At a superficial level, the property exhibits motifs common to both firms: Stone's screen wall and soaring columns, Church's geometric landscape forms. At the more basic level of function, however, the design failed to satisfy its clients, fell short of its inspiring vision of a palatial garden for healing, and has not retained the initial grandeur of its setting. Several other California hospitals by Stone are more successful examples of his work in this area. The groundbreaking work in organ transplantation conducted by Dr. Norman Shumway and other major medical discoveries is significant; however, the places where the events took place have been completely transformed since the 1960s.

#### *Criterion 4: Information Potential*

The Main Medical Center Complex does not appear to have the potential to yield important information in history or prehistory. This criterion is typically applied to archaeological sites or examples of unusual construction methods for buildings or structures. The Main Medical Center Complex is not eligible for listing under criterion 4.

A careful review of the criteria, particularly the admonition to reserve listing of recent properties to those of “exceptional” merit suggests that the Main Medical Center Complex is not eligible for listing on the California Register of Historic Places.

### ***Summary of Potential Cultural Resources in the Project Area***

#### **Archaeological Resources**

There is little risk of encountering buried cultural deposits in the project area; previous human use of the area has been light and construction of the current medical center buildings has erased any near-surface deposits that may have been present. A deeply buried ancient stream channel has yielded fossils of extinct mammals; there is some possibility that paleontological finds may be made during deep excavations during construction of the proposed projects.

#### **Historical Resources**

Seven properties have been reviewed for historical significance. The Governor’s Avenue historic landscape feature and the Hoover Pavilion appear to meet the criteria for listing on the California Register of Historic Places. The remaining properties failed to meet the criteria.

The Governor’s Avenue alignment is compromised within the project area by gaps and inconsistent treatment of replacement sections; however, improvements to reinforce the historic alignment could be made during design of new facilities. No project component is proposed to be located on the section of the historic alignment that remains in place today.

New buildings are proposed to be located adjacent to the Hoover Pavilion. If the City agrees that the Hoover Pavilion is an historical resource then a substantial adverse change to the resource could result in a significant affect on the environment. In this context, CEQA Guideline 15064.5(b) defines a substantial adverse change in the significance of an historical resource as “alteration of the resource or its immediate surroundings such that the significance of a resource would be materially impaired.” The significance of an historical resource is materially impaired when a project alters those physical characteristics that convey its historical significance and that justify its inclusion in the California Register of Historic Places, as determined by the lead agency. For Hoover Pavilion, these features should include the distinctive ziggurat roofline, Art Deco exterior ornamental details, and the entry fountain plaza. Careful attention to these historic features should reduce the potential for impact to the historic character of the property.



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## Notes and References

- <sup>1</sup> Elena Reese, John Holson and Kevin Bartoy. *Historical Archaeological Investigations at the Stanford Mansion, Leland Stanford Jr. Mausoleum, and CA-SCL-623/H*. Berkeley: Pacific Legacy, Inc. 2007.
- <sup>2</sup> PRC Section 21084.1, 14 CCR Section 15064.5(3).
- <sup>3</sup> Office of Historic Preservation, State of California. Available at [http://ohp.parks.ca.gov/default.asp?page\\_id=21238](http://ohp.parks.ca.gov/default.asp?page_id=21238).
- <sup>4</sup> Office of Historic Preservation, State of California. *Instructions for Preparing Documentation for Nominating Historical Resources to the California Register of Historical Resources*. August 1997. Page 11. Available at <http://ohp.parks.ca.gov/pages/1069/files/07%20cal%20reg%20how%20to%20nominate.pdf>.
- <sup>5</sup> EIP Associates. *Draft Environmental Impact Report: Stanford Sand Hill Road Corridor Projects*. Volume 2, Page 4.3-8. 18 June 1996.
- <sup>6</sup> J. Timothy Keller, ASLA, and Genevieve P. Keller Land and Community Associates. *How to Evaluate and Nominate Historic Designed Landscapes*. *National Register Bulletin* 18. Available at <http://www.nps.gov/history/nr/publications/bulletins/nrb18/>.
- <sup>7</sup> Office of Historic Preservation, State of California. *Instructions for Preparing Documentation for Nominating Historical Resources to the California Register of Historical Resources*. August 1997. Page 11. Available at <http://ohp.parks.ca.gov/pages/1069/files/07%20cal%20rcg%20how%20to%20nominatc.pdf>.
- <sup>8</sup> Norman E. Tuturow. *The Governor: The Life and Legacy of Leland Stanford, A California Colossus*. Volume 2. Spokane: Arthur H. Clark. 2004. Page 965.
- <sup>9</sup> Barry Whitehead. *Horse Racing in Sacramento: A Brief History*. Stanford University Libraries. 1994. Page 13.
- <sup>10</sup> Norman E. Tuturow. *The Governor: The Life and Legacy of Leland Stanford, A California Colossus*. Volume 2. Spokane: Arthur H. Clark. 2004.
- <sup>11</sup> There are a number of listed properties associated with Leland Stanford, Sr. including the Governor's Mansion (listed on the National Register in 1933 as the Stanford-Lathrop House) in Sacramento, the Palo Alto Stock Farm properties described above, the Main Quad at Stanford University, and a series of railroad properties across the west. These properties are more closely associated with Stanford's career as a business leader, public servant and philanthropist than the avenue that joined two of his stable yards.
- The National Register also acknowledges the potential importance of "commemorative properties" and cautions that: "A commemorative property cannot qualify for association with the event or person it memorializes." The naming of the avenue for the Governor appears to have taken place after his death at his Palo Alto home in 1893. Unnamed on earlier maps, it first appears as "Governor's or Gum Tree Avenue" on a 1908 survey map. No formal action was taken by Mrs. Stanford or the university to dedicate the avenue to the Governor, it appears to be an informal naming arising from the well-known fact that Leland Stanford used the avenue (which he had posted as a "Private Road") to travel between his home and his famous horse farm.
- <sup>12</sup> Tom Turner. *Garden History: Philosophy and Design 2000 BC – 2000 AD*. London: Spon Press. Pages 166-167.
- <sup>13</sup> Sarah M. Couch. The Practice of Avenue Planting in the Seventeenth and Eighteenth Centuries. *Garden History* 20(2):12. Autumn 1992.
- <sup>14</sup> Office of Historic Preservation, State of California. *Instructions for Preparing Documentation for Nominating Historical Resources to the California Register of Historical Resources*. August 1997. Page 21. Available at <http://ohp.parks.ca.gov/pages/1069/files/07%20cal%20reg%20how%20to%20nominatc.pdf>.
- <sup>15</sup> J. Timothy Keller, ASLA, and Genevieve P. Keller Land and Community Associates. *How to Evaluate and Nominate Historic Designed Landscapes*. *National Register Bulletin* 18. Available at <http://www.nps.gov/history/nr/publications/bulletins/nrb18/>.
- <sup>16</sup> Office of Historic Preservation, State of California. *Instructions for Preparing Documentation for Nominating Historical Resources to the California Register of Historical Resources*. August 1997. Page 9.. Available at <http://ohp.parks.ca.gov/pages/1069/files/07%20cal%20reg%20how%20to%20nominate.pdf>.
- <sup>17</sup> Guenter B. Risse. *Mending Bodies, Saving Souls: A History of Hospitals* (Oxford University Press, 1999).
- <sup>17</sup> Jeremy Taylor. *The Architect and the Pavilion Hospital, Dialogue and Design Creativity in England 1850-1914*. London and New York: Leicester University Press. 1997. Page 468.

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<sup>18</sup> See *The Hospital: A Social and Architectural History*, by John D. Thompson and Grace Goldin (Yale University Press, 1975) for an extensive discussion of “Nightingale Wards.”

<sup>19</sup> Some European hospitals in the 17<sup>th</sup> and 18<sup>th</sup> centuries for example had single wards serving more than 400 patients (often 4-6 lying in the same bed).

<sup>20</sup> Nightingale was a crusader for hygiene in hospitals, based on the “miasma” theory of disease: “Florence Nightingale was a thorough-going miasmatist for whom germs did not exist. She believed that the human body even in health is constantly exhaling from the lungs and skin, awake or asleep, watery vapor and organic matter ‘ready to enter into the putrefactive condition.’ These morbid exhalations must be instantly and perpetually carried off by ventilation.” (Thompson and Goldin, page 159.)

<sup>21</sup> Thompson and Goldin report the first “real hospital laboratory” appeared in Paris in 1893. John D. Thompson and Grace Goldin. *The Hospital: A Social and Architectural History*. Yale University Press, 1975. Page 189.

<sup>22</sup> See Jeremy Taylor, *The Architect and the Pavilion Hospital: Dialogue and Design Creativity in England 1850-1914* for a detailed discussion of the explosion in architectural creativity during the period of transition from pavilion plans to skyscrapers (London: Leicester University Press, 1997).

<sup>23</sup> Guenter B. Risse provides a cutting analysis of the business aspects of new hospital construction in *Mending Bodies, Saving Souls: A History of Hospitals* (Oxford University Press, 1999).

<sup>24</sup> Jeremy Taylor. *The Architect and the Pavilion Hospital, Dialogue and Design Creativity in England 1850-1914*. London and New York: Leicester University Press. 1997. Page 28.

<sup>25</sup> A well-preserved example of a doctor’s home and office from this period can be seen at the Museum of American Heritage on Homer Street in Palo Alto. The Museum occupies a house built by Dr. Thomas Williams in 1907 and occupied by his family until 1989. The Williams House sits directly across Homer Avenue from the Roth Building, an early home of the Palo Alto Medical Foundation.

<sup>26</sup> See Ward Winslow, *Palo Alto: A Centennial History*. Palo Alto Historical Association, 1993.

<sup>27</sup> Camp Fremont sprawled across more than 7000 acres of Menlo Park and adjacent Stanford lands. The base had more than 1000 structures, which were sold at auction in 1918. (California State Military Museum.) One notable surviving Camp Fremont building is the former USO Hostess House. The Hostess House, designed by Julia Morgan, is listed on the National Register and is currently occupied by the MacArthur park restaurant adjacent to the Palo Alto Train Station on University Avenue.

<sup>28</sup> Report of the President, Academic Year 1918-1919. Stanford University Board of Trustees. Pages 130-131. The Alpine Isolation Hospital building is still standing on Stanford lands near Interstate 280; the building is currently under lease as a private residence.

<sup>29</sup> The Con Home later became the Children’s Hospital at Stanford and the low pavilion wards and Stanford house were demolished in 1965 for construction of a modern hospital. The Children’s Hospital was moved to the Lucille Packard Children’s Hospital in 1989 and the site was redeveloped as the Classic Residences by Hyatt senior housing community in 2005.

<sup>30</sup> The Palo Alto Medical Foundation expanded onto adjacent properties along Homer Avenue until moving to a large new complex on El Camino Real in 1999. Most of the PAMF facilities were demolished; the Roth Building has been preserved and is planned for rehabilitation to house the Palo Alto History Museum. Local historians have prepared a nomination to the National Register of Historic Places for the Roth Building.

<sup>31</sup> Stanford President Ray Lyman Wilbur’s report to the University Trustees, September 15, 1928.

<sup>32</sup> One city council member argued that a Palo Alto firm should be used; however the City Council directed the selection of “an architect of wide experience in hospital construction.” Reed and Corlett and the San Francisco firm Bakewell and Brown competed for the project, with Reed and Corlett winning the contract (Palo Alto City Council Minutes, July 22, 1929).

<sup>33</sup> See Guenter B. Risse *Mending Bodies, Saving Souls: A History of Hospitals* (Oxford University Press, 1999) for an account of how hospitals handled patient billing – and room amenities -- in the era before medical insurance.

<sup>34</sup> Will Corlett, *Local Hospital Excels*. Daily Palo Alto Times. The medical theory behind the use of sunlight and “open air treatment” is summarized in Jeremy Taylor’s *The Architect and the Pavilion Hospital, Dialogue and Design Creativity in England 1850-1914*. London and New York: Leicester University Press. 1997.

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<sup>35</sup> Jeremy Taylor's *The Architect and the Pavilion Hospital, Dialogue and Design Creativity in England 1850-1914*. London and New York: Leicester University Press. 1997. Also Guenter B. Risse *Mending Bodies, Saving Souls: A History of Hospitals*. Oxford University Press. 1999

<sup>36</sup> See Melissa Connor and James Schneck's overview on "Hospitals in the United States Military" prepared for their report on Fort Carson, Colorado. National Park Service, 1997. They report that specifications for military hospitals shifted several times during World War II but generally reflected a higher priority on speed than on quality of construction. The pavilion style plan dominated: "In general, a 1,000-bed general hospital would have 62 buildings: 33 wards, administration, surgical, receiving and forwarding, and bath buildings, messes and personnel buildings" (Page 12).

<sup>37</sup> National Park Service. See also California State Military Museum website <http://www.militarymuseum.org/LettermanAMC.html>

<sup>38</sup> This Kaiser Richmond Hospital served mainly women, employed in shipbuilding during the war. See the Rosie the Riveter Trust website for additional information.

<http://www.rosiethe Riveter.org/kaiserfieldhosp.html>

<sup>39</sup> Photo caption: "Shown here are a group of wounded Nisei veterans of the 100th Battalion and 442nd Infantry Combat Team, being hospitalized at Dibble General Hospital, Menlo Park, Palo Alto, California. The boys were caught by the camera man in the Public Relations office. Left to right, front row, they are: PFC Walter Heirakuji, Box 20, Hawi, Hawaii, member of the 442nd Combat Infantry Team, wounded at St. Luciano, Italy, on July 17, 1944; Pvt. Masao Hayashida, member of the 442nd Infantry Combat Team, 160 Horualea, Hawaii, wounded at Leghorn, Italy, on July, 1944; and Corp. Minoru Yoshida, 1325 16th Avenue, Honolulu, Hawaii, member of the 100th Infantry Battalion, wounded at Cecina, Italy on July 2, 1944. Left to right, back row, they are: S/Sgt. Jack Kawamoto, Hawaii, member of the 442nd Combat Team, wounded at Leghorn, Italy, July 10, 1944; PFC Kiyotaka Uchimura, Kealakekua, Hawaii, member of the 100th Infantry Battalion, wounded at Bellefontaine, France, in October, 1944; Corp. Steve Shimizu, 2320 Young Street, Honolulu, Hawaii, member of the 442nd Combat Infantry Team, wounded at Vosges Mountains, France, on November 2, 1944; PFC Roy T. Tsutsui, 480 West Second South Street, Salt Lake City, Utah, 442nd Infantry Combat Team, wounded at Lespezia, Italy, on April 15, 1945. -- Photographer: Iwasaki, Hikaru -- Palo Alto, California. 7/14/45."

<sup>40</sup> The 59<sup>th</sup> Evacuation Hospital established a 750-bed hospital in Normandy about two weeks after D-Day in 1944 (Frank B. Berry, MD, no date, Office of the Surgeon General of the Army).

<sup>41</sup> Stephen Verderer and David J. Fine. *Healthcare Architecture in an Era of Radical Transformation*. New Haven: Yale University Press. 2000. Page 13.

<sup>42</sup> Stephen Verderer and David J. Fine. *Healthcare Architecture in an Era of Radical Transformation*. New Haven: Yale University Press. 2000. Page 23.

<sup>43</sup> Stephen Verderer and David J. Fine. *Healthcare Architecture in an Era of Radical Transformation*. New Haven: Yale University Press. 2000. Page 23.

<sup>44</sup> Stephen Verderer and David J. Fine. *Healthcare Architecture in an Era of Radical Transformation*. New Haven: Yale University Press. 2000. Page 217.

<sup>45</sup> John D. Thompson and Grace Goldin. *The Hospital: A Social and Architectural History*. Yale University Press, 1975. Page 201.

<sup>46</sup> For a more detailed account of the debate, see Edwin Kiester, Jr.'s biography of Tressider: *Donald B. Tressider, Stanford's Overlooked Treasure*. Stanford Historical Society 1992.

<sup>47</sup> John L. Wilson, Stanford University's School of Medicine and the Predecessor Schools: An Historical Perspective. Lane Library, Stanford School of Medicine.

<sup>48</sup> The Palo Alto VA Hospital was damaged in the 1989 Loma Prieta earthquake and was replaced by new hospital buildings. The 1960 building was demolished.

<sup>49</sup> Photograph courtesy of the Palo Alto Historical Association.

<sup>50</sup> Palo Alto's first hospital, the Student's Guild, was established on Lytton Avenue (at Cowper Street) during the typhoid epidemic of 1903. The Peninsula Hospital opened at Embarcadero Road (at Cowper Street) in 1910.

<sup>51</sup> Palo Alto City Council Minutes, October 16, 1928.

<sup>52</sup> Hoover's career in public service is honored with many commemorative sites including dozens of schools, Hoover Dam, and the Hoover Institution on War, Revolution and Peace founded by Herbert Hoover on the Stanford campus in 1919 (as the Hoover War Library; the signature tower was completed in

1941). There are a number of National Register properties associated with Hoover, including the Herbert Hoover National Historic Site at his boyhood home in West Branch, Iowa, the Hoover Dam, and the Lou Henry Hoover House on the Stanford campus as well as the various federal buildings in which he served in Washington D.C. first as Secretary of Commerce and then as President (1929-1933).

The National Register's instructions on commemorative properties apply to this association between Herbert Hoover and the Hoover Pavilion: "A commemorative property cannot qualify for association with the event or person it memorializes. A commemorative property may, however, acquire significance after the time of its creation through *age, tradition, or symbolic value*" (NRB 15). The further instruction to compare similar properties suggests that there is not enough to distinguish this commemoration of Hoover from the literally dozens of others, including three in the local vicinity (Hoover House, Hoover Tower, and Herbert Hoover Elementary School in Palo Alto).

<sup>53</sup> Ward Winslow. *Palo Alto, A Centennial History*. Palo Alto Historical Association. 1993. Pages 170-172.

<sup>54</sup> "Empire State Building." Online Photograph. Encyclopedia Britannica Online. 23 July 2007

<http://www.britannica.com/eb/art-58321> .

<sup>55</sup> Weber, Eva. *American Art Deco*. North Dighton, MA: JG Press.

<sup>56</sup> Jona Lendering for *Livius.Org*, 2004. Revision: 1 April 2006

<sup>57</sup> Weber, Eva. *American Art Deco*. North Dighton, MA: JG Press. Page 8.

<sup>58</sup> Michael F. Crowe. *Deco by the Bay: Art Deco Architecture in the San Francisco Bay Region*. New York: Viking Studio Books 1995.

<sup>59</sup> The ground floor had three locker rooms: staff, nurses, and "Filipinos." Doctors and surgeons had "coat rooms" upstairs.

<sup>60</sup> *Daily Palo Alto*. 4 June 1929. The article concludes with: VOTE FOR THE HOSPITAL BONDS.

<sup>61</sup> *Report of the President*. Stanford University Bulletin. December 1941. Page 345. He also reported that the cost per patient day was \$7.74.

<sup>62</sup> Ward Winslow. *Palo Alto, A Centennial History*. Palo Alto Historical Association. 1993. Pages 75-77.

<sup>63</sup> Julie Cain and Laura Jones for the Town of Atherton. *Historical Artifact Inventory*. January 2006.

<sup>64</sup> *National Register of Historic Places Bulletin* 15.

<sup>65</sup> Photo courtesy Palo Alto Historical Association. Available online at <http://images.pahistory.org/cgi-bin/viewer.exe?CISOROOT=/PAHA&CISOPTR=1879&CISOMODE=grid> .

<sup>66</sup> *The Cap and Seal, The Annual of the San Francisco Hospital School of Nursing*, 1928, San Francisco Hospital, San Francisco. Viewed at <http://www.sfgenealogy.com/sf/history/hgsfl.htm> .

<sup>67</sup> Letterman General Hospital, Nurses' Quarters, Girard Road & Lincoln Boulevard, Presidio of San Francisco, San Francisco, San Francisco County, CA. Library of Congress, Prints and Photographs Division, Historic American Buildings Survey or Historic American Engineering Record, Reproduction Number CAL, 38-SANFRA, 169-2.

<sup>68</sup> Agnews State Hospital, Female Nurses' Home, South Circle Drive between Fourth & Mesa Lanes, Santa Clara, Santa Clara County, CA. Library of Congress, Prints and Photographs Division, Historic American Buildings Survey or Historic American Engineering Record, Reproduction Number CAL 2710 – AO-1.

<sup>69</sup> Dave Weinstein. *Signature Architects of the San Francisco Bay Area*. Layton, Utah: Gibbs Smith. Pages 70-77.

<sup>70</sup> *Palo Alto Intermodal Transit Center Project Palo Alto, California Draft Historic Resource Evaluation Report*. Carey & Co, Inc. Architecture. 11 September 2006. Page 12.

<sup>71</sup> *National Register of Historic Places Bulletin* 15.

<sup>72</sup> Office of Historic Preservation, State of California. *Instructions for Preparing Documentation for Nominating Historical Resources to the California Register of Historical Resources*. August 1997. Page 12. Available at <http://ohp.parks.ca.gov/pages/1069/files/07%20cal%20reg%20how%20to%20nominate.pdf> .

<sup>73</sup> The report is available online at

[http://www.gsa.gov/gsa/cm\\_attachments/GSA\\_DOCUMENT/GEMbook\\_R2-v01-t\\_0Z5RDZ-i34K-pR.pdf](http://www.gsa.gov/gsa/cm_attachments/GSA_DOCUMENT/GEMbook_R2-v01-t_0Z5RDZ-i34K-pR.pdf)

<sup>74</sup> *Polk's Palo Alto City Directory* 1961.

<sup>75</sup> Property file, 701 Welch Road. Stanford Real Estate Office.

<sup>76</sup> Including the archives of the Palo Alto Weekly, Country Almanac, and Stanford Report.

<sup>77</sup> Pierluigi Serraino. *Icons of Northern California Modernism*. San Francisco: Chronicle Books. 2006. Pages 140-149.

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- <sup>78</sup> See *Arts and Architecture* magazine, sponsors of the Case Study House competition for more information. Knorr's submission for Case Study House #19 can be viewed at <http://www.artsandarchitecturemag.com/case.houses/pdf/19.pdf>.
- <sup>79</sup> Wally Fields. Remembering Bay Area Case Study House Architect Don Knorr. *Eichlerholc Musings*. Available at [http://www.eichlernetwork.com/ENzone\\_12.html](http://www.eichlernetwork.com/ENzone_12.html).
- <sup>80</sup> Pierluigi Serraino. *Icons of Northern California Modernism*. San Francisco: Chronicle Books. 2006. Pages 140-149.
- <sup>81</sup> Pierluigi Serraino. *Icons of Northern California Modernism*. San Francisco: Chronicle Books. 2006. Page 142. Photographer unknown.
- <sup>82</sup> Rolando Rivas-Camp, editor. *Growth, Efficiency and Modernism: GSA Buildings of the 1950s, 60s and 70s*. United States Government Services Administration. 2003. Available at [http://www.gsa.gov/gsa/cm\\_attachments/GSA\\_DOCUMENT/Modern\\_R2-v01-t\\_0Z5RDZ-i34K-pR.pdf](http://www.gsa.gov/gsa/cm_attachments/GSA_DOCUMENT/Modern_R2-v01-t_0Z5RDZ-i34K-pR.pdf). The questions are taken from the GSA Eligibility Assessment Tool included in the report.
- <sup>83</sup> Pierluigi Serraino. *Icons of Northern California Modernism*. San Francisco: Chronicle Books. 2006. Page 140.
- <sup>84</sup> Office Memorandum, Harry Sanders to Boyd Smith. 29 May 1969.
- <sup>85</sup> Letter, Gail Whelan to Richard Lyman. 25 July 1974.
- <sup>86</sup> Letter, John Whelan to Allan Lee. 23 August 1979.
- <sup>87</sup> *Polk's Palo Alto City Directory*. 1961.
- <sup>88</sup> Property file, 703 Welch Road. Stanford Real Estate Office.
- <sup>89</sup> Rolando Rivas-Camp, editor. *Growth, Efficiency and Modernism: GSA Buildings of the 1950s, 60s and 70s*. United States Government Services Administration. 2003. Available at [http://www.gsa.gov/gsa/cm\\_attachments/GSA\\_DOCUMENT/Modern\\_R2-v01-t\\_0Z5RDZ-i34K-pR.pdf](http://www.gsa.gov/gsa/cm_attachments/GSA_DOCUMENT/Modern_R2-v01-t_0Z5RDZ-i34K-pR.pdf). The questions are taken from the GSA Eligibility Assessment Tool included in the report.
- <sup>90</sup> Marc Treib. *Thomas Church, Landscape Architect: Designing a Modern Landscape*. San Francisco: William Stout. 2003. Page 256.
- <sup>91</sup> Property file, 703 Welch Road. Stanford Real Estate Office.
- <sup>92</sup> A laboratory employee was accused of re-using needles. Chris Sadeghian. *Palo Alto Weekly*. 21 April 1999. Available online at [http://www.paloaltoonline.com/weekly/morgue/news/1999\\_Apr\\_21.NEEDLE.html](http://www.paloaltoonline.com/weekly/morgue/news/1999_Apr_21.NEEDLE.html).
- <sup>93</sup> National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation.
- <sup>94</sup> Marc Treib. *An Everyday Modernism: The Houses of William Wurster*. San Francisco Museum of Modern Art and University of California Press. 1995.
- <sup>95</sup> Marc Treib. *Thomas Church, Landscape Architect: Designing a Modern California Landscape*. San Francisco: William Stout. 2003.
- <sup>96</sup> He designed a home for Dr. Newell in Palo Alto as well. Wurster, Bernardi and Emmons papers. College of Environmental Design Archives, University of California Berkeley.
- <sup>97</sup> Rolando Rivas-Camp, editor. *Growth, Efficiency and Modernism: GSA Buildings of the 1950s, 60s and 70s*. United States Government Services Administration. 2003. Available at [http://www.gsa.gov/gsa/cm\\_attachments/GSA\\_DOCUMENT/Modern\\_R2-v01-t\\_0Z5RDZ-i34K-pR.pdf](http://www.gsa.gov/gsa/cm_attachments/GSA_DOCUMENT/Modern_R2-v01-t_0Z5RDZ-i34K-pR.pdf). The questions are taken from the GSA Eligibility Assessment Tool included in the report.
- <sup>98</sup> Marc Treib. *An Everyday Modernism: The Houses of William Wurster*. San Francisco Museum of Modern Art and University of California Press. 1995. Page 60.
- <sup>99</sup> Marc Treib. *An Everyday Modernism: The Houses of William Wurster*. San Francisco Museum of Modern Art and University of California Press. 1995. Page 60. See also Gordon Young. Blueprint for Obscurity. *Metro*. 18 January 1996.
- <sup>100</sup> Photograph by Roger Sturtevant. Roger Sturtevant Collection. Oakland Museum.
- <sup>101</sup> Property file, 1101 Welch Road. Stanford Real Estate Office.
- <sup>102</sup> Wurster, Bernardi and Emmons papers. College of Environmental Design Archives, University of California Berkeley. Box 9, Folder 141. Stanford Medical Plaza, 1956
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California Department of Parks and Recreation historical resource recording forms for Hoover Pavilion/Palo Alto Hospital and Governor's Avenue were submitted under separate cover in September 2007.